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SEXUAL BEHAVIOR AND SELF-ESTEEM IN COLLEGE WOMEN

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SEXUAL BEHAVIOR AND SELF-ESTEEM IN COLLEGE WOMEN

By

Suzanne Libby Kallen

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ABSTRACT

SEXUAL BEHAVIOR AND SELF-ESTEEM IN COLLEGE WOMEN

By

Suzanne Libby Kallen

On the basis of reference group theory, the prediction was made that pressure created by differences between a person's own behavior and parental teachings or peer behavior should result in lower self-esteem. The association between self-esteem and similarity of the subject's reported sexual behavior to perceived parental attitudes about sex and to friends' sexual activities was investigated. This relationship was expected to be modified by such factors as locus of control, closeness to parents or friends, and year in school. Differences between subjects' reported sexual behavior, their own values, and normative sexual experience of the group were also predicted to relate to self-esteem.

There were 402 subjects, a stratified random sample of women attending Michigan State University as undergraduates in 1976. Data were collected through questionnaire and personal interview. The questionnaires included a 13-item self-esteem scale measuring seven personal characteristics each weighted by importance to the subject. A short form of the Rotter I-E Scale was used. Other scales were formed from questionnaire and interview data.

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Results indicated that parental attitudes about sexuality had minimal influence on the self-esteem of the sample. The only significant relationship between self-esteem and subject-parent difference scores occurred when subjects were highly concerned with external values and were involved in more sexual activity than parents would approve. Friends' influence was also less than expected, but there was a tendency for lower self-esteem when subjects were less sexually active than their friends. This sample yielded other non-predicted findings. Non-virgins had significantly higher self-esteem than virgins, and there was a significant positive relationship between self-esteem and number of years since first intercourse. Virgins tended to be different from non-virgins in the characteristics which related to self-esteem. Virgins' self-esteem was enhanced by close contacts with parents and friends and identification with the mother, while non-virgins' self-esteem was associated with maturational variables such as internal locus and year in school.

To David and my Parents

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INTRODUCTION

During the past twenty years, as part of what is popularly known as the "sexual revolution," an upheaval has occurred in the sexual behavior of unmarried women in the United States. Although a plethora of research studies have investigated this phenomenon, the results are mainly confined to descriptive statistics. Any rapid cultural shift provides social scientists with an opportunity to investigate the effects of that change on the individual. Often, as seems to be the case with the "sexual revolution," there is a conflict of values among various segments of the society until the change becomes a fixed aspect of the culture. Faced with an intense disagreement between various important reference groups, the individual must resolve the internal conflict either by disavowing one or more of the discordant values or by suffering anxiety and loss of self-esteem. The current change in sexual mores implies that sexual behavior or lack of it among young, unmarried women usually creates a value conflict with either peers or parents. Some interesting questions arise from this schism; does the widening gap between parental and peer expectations produce conflicts about sexual behavior in young women? Are those whose parental values are more "old-fashioned" more

likely to feel unhappy with themselves than those whose parents have altered their views to be more in line with the peer culture? What is the psychological meaning of remaining a virgin when most peers are not? These are among the questions which are being investigated in this study. It is hoped that the results will have implications for understanding changing values, reference groups, and self-esteem beyond the area of sexual behavior.

Theoretical Framework

Self-Esteem

This study was developed to examine the relationships between the self-esteem of college women, the perceived values and behaviors of parents and friends with respect to sexual expression, and the young women's reported sexual behavior. Self-esteem is defined as positive or negative evaluations of beliefs about the self. For this study, the term "self-esteem" is used to mean a hypothetical construct consisting of the following features: (1) A conscious positive or negative evaluation of various characteristics of the self; (2) An experience of each characteristic as being more or less essential to the individual; (3) A drive to maintain a positive self-evaluation.

Rosenberg defined self-esteem as, "a positive or negative attitude toward a particular object, namely the self" (Rosenberg, 1965, p. 30). Coopersmith added to this definition, by stating, "By self-esteem we refer to the evaluation

which the individual makes and customarily maintains with regard to himself; it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy." Self-esteem is expressed as "subjective experience conveyed to others by verbal reports and other overt expressive behavior" (Coopersmith, 1967, p. 10). Wells uses "self-esteem" interchangeably with "self-evaluation." He calls it a "hypothetical construct formed by social scientists to summarize certain features of human behavior," and, as such, it cannot be directly measured but only inferred (Wells & Marwell, 1976, p. 9). The level of self-esteem or "the arrangement of people according to the positiveness of self-esteem" is the "quantifiable dimension for making descriptions according to the construct" (Ibid., p. 11).

All theorists who discuss the concept of self-esteem agree that it evolves as a function of the relationship of the individual to others whose opinions he values. Sullivan (1953) spoke of self-esteem as a conscious development in the individual derived from attitudes held by "significant others" in the person's life. He said, "The self may be said to be made up of reflected appraisals" (Sullivan, 1953, p. 10). He felt that people achieve knowledge of their capacities by comparison with others, but that the normal self-evaluative process can be interfered with by anxiety, so that self-appraisal is often not realistic.

For Sullivan, the "self" is wholly interpersonal and is learned. In infancy and childhood the main "significant others" are parents and later teachers, and, in preadolescence, the "chum" of the same sex. The attitudes of these enormously important people toward the individual teach him how to think about himself.

Mahler (1975) elaborated the process by which this learning takes place. She spoke of a rapprochement phase" occurring between sixteen months and three years, beginning with the child's consciousness of itself as a separate individual from its mother. At this stage the child needs the reassurance of the mother's presence, but also her permission to be a separate individual. To cope with the sense of separateness, the child first uses the mother as an extension of self and later incorporates the attitudes of mother (and father) as a part of a self image. Where the parental attitudes towards the child are mainly positive, the child develops a mostly positive self-image ("good me"). Negative attitudes are incorporated also ("bad me"). By the third year, the child should have a strong sense of self as a separate entity, and to be able to maintain a mental image of the mother in her absence. As part of the sense of self, the child by this age should have unified both positive and negative attitudes as part of a whole self-concept. In operational terms, the rankings of these individual attitudes on a scale of positive to negative would

constitute the young child's self-esteem.

Other Freudian psychologists agree with Mahler that self-esteem arises after the internal differentiation of self from others, but describe it as a kind of self-love, a garnering of narcissistic supplies to the self. "Self-esteem is the awareness of how close the individual is to the original omnipotence" (Fenichel, 1945). This definition clearly implies the presence of a drive to think positively of ones self, but also suggests that self-esteem has a defensive rather than a reality-oriented quality. According to Fenichel, this "omnipotent" sense of self-esteem changes after the development of the superego and becomes related to superego approval or disapproval (Ibid., 1945). Superego develops through the incorporation of the values of the same sexed parent. Calvin Hall (1954) said, "the superego is the representative in the personality of the traditional values and ideals of society as they are handed down from parents to children." Violations of superego proscriptions result in feelings of guilt.

Allport (1963) related self-esteem to shame rather than guilt. Guilt and shame are closely related constructs, with guilt referring to the emotional reaction to the violation of standards internalized through identification with parents before the child is six years old. Lynd described the difference between guilt and shame as, "guilt, or self-reproach, is based on internalization of values--in contrast

to shame, which is based upon disapproval coming from outside, from other persons" (1961, p. 21). She characterized guilt as feelings of being no good, while shame involves feelings of being inadequate. She felt that in practice they often overlap. She defined shame as "a wound to one's self-esteem, a painful feeling of degradation excited by the consciousness of having done something unworthy of one's previous idea of one's own excellence. It is also a particularly painful feeling of being in a situation that incurs the scorn or contempt of others" (Ibid., p. 23). The violation of what one perceives as guiding principles for behavior could be interpreted as creating a feeling of either shame or guilt, depending on whether the values are seen as internal or external to the individual. In any given situation where a behavior is seen as violating an important rule, a temporary loss of self-esteem should occur, regardless of whether the person perceives the standard to be that of others or his own.

Reference Groups

When guilt is related to the loss of self-esteem, internal standards have been disobeyed. The individual involved can be asked directly about his own values and in what way he feels he has violated them by his behavior. When shame is the emotion being felt, it is important to specify both the proscribed behavior, and the persons or

groups to whom the prohibition is being attributed. For the violation to result in feelings of shame, those persons or groups must have some real importance to the individual. Sullivan (1953) talked about "significant others." Sociological theorists use the term "reference group" in the same context. Merton said that, "in general, then, reference group theory aims to systematize the determinants and consequences of those processes of evaluation and self-appraisal in which the individual takes the values or standards of other individuals and groups as a comparative frame of reference" (Merton & Kitt, 1950, p. 50). Sherif defined reference groups as "the sets to which he feels he belongs, wants to belong, relates himself to psychologically" (Sherif & Sherif, 1964, p. 6). He went so far as to say that changes in self-concept as well as attitudes and values can always be explained by a corresponding change in reference groups (Ibid.).

Reference group theory becomes particularly important for a study of self-esteem since persons tend to judge their performance on the basis of the perceived values of those people whose opinions are important to them. Although Sullivan, using the term "significant others," refers to important individuals in the person's life, and the term "reference group" refers to a collection of individuals with a common history and similar attitudes, interests, etc., the terms will be used interchangeably here. The important

characteristic is that the individuals or groups have salience for a particular individual at a particular time. Therefore, parents, friends and peers are all "reference groups," although strictly speaking they may not fulfill the definition.

The importance of one reference group over another varies at particular times in the life of the individual. It is generally conceded that for the preschool years the parents (mainly the mother) constitute the most cogent reference group. When the child enters school, the opinions and values of other adults such as teachers, and other children including both friends and other peers, assume a greater and greater importance. Which reference groups are salient for the individual have been found to depend both on the person's age and sex. Constanzo and Shaw (1966) found that conformity to peer pressure increased at a steady rate until age fourteen, and then decreased until adulthood. Curtis (1975) found that among adolescents in grades 7 to 12, parental influence decreased to grade 11, then rose again. However, despite the decrease, parental influence at all ages was greater than that of peers. Sebald and Douvan both reached the conclusion from their data that girls were more parent oriented than boys, though they also tended to shift to a peer orientation as they grew older (Douvan, 1960; Sebald, 1980).

Until this point the assumption under discussion has been that of the reference group theorists; everyone tends to behave in such a manner as to gain approval from one or more reference groups. However, much of the reference group research has given the respondent a forced choice of which group (usually parents or friends) would be listened to in a given situation. It has recently been pointed out that where no forced choice is presented, adolescents will frequently point to their own value systems as being the only relevant ones determining their behavior. Sebald (1980) found repeating a 1960 study in 1976 that 16% of the female respondents wrote in the questionnaire that they would consult "myself" or "my own opinion" where none had in 1960. Curtis (1975), studying 9,000 adolescents, found that among higher socioeconomic groups greater independence of opinion rather than a shift from a parent to a peer group orientation occurred toward the end of high school. Constanzo and Shaw (1966) in their research on conformity found that from 19 to 21 (their oldest group) late adolescents paid more attention to their own judgments than to those of their peers. Reference group theorists explain findings which relate increasing age to reliance on internal rather than reference group values by saying that people have internalized the values of their important reference groups. Although they no longer need to consult other people before forming their own attitudes, people behave in the context of

their internalized significant others. Even if they reject reference group values completely, those group attitudes still provide a comparison for behavior (Shibutani, 1955).

Psychodynamic theorists would also be likely to explain an internal frame of reference as arising from earlier identifications. Erikson (1968) speaks of the main task of adolescence being the establishment of a personal identity. This sense of oneself as an individual must precede the next stage, intimacy with someone else, for full psychological growth. This sense of identity would preclude complete attention to the opinion of important reference groups in determining one's own adequacy. However, the assumption is made that these personal, internal values derive from those of significant others in the past whether or not this association is consciously recognized by the individual.

How much the self-esteem of a given individual will be affected by his perceptions of reference group attitudes will depend on several issues. One factor is the closeness both in terms of feeling and amount of contact that the person currently has with a given reference group. This should reflect the current importance of the group to the individual. Sherif and Sherif (1964) said that the relevance of group approval or disapproval and group boundaries to be heeded are related to the significance of the group for the person. They measured the relative importance of the group

by the person's ranking of it relative to other affiliations and the amount of time spent with the group. "To the extent that the individual derives a sense of belongingness and a sense of being somebody to be counted through his membership in the group, the group increasingly becomes the source of personal security and the context for gauging his personal feelings of success and failure in relevant spheres of activity." (Sherif & Sherif, 1964, p. 251)

Another factor determining how much self-esteem is affected by reference group attitudes or behaviors is the orientation of the individual towards the opinions of others. Some people are more dependent on the attitudes of others outside of themselves for self-evaluation. Those who rely on external values are more likely to have lower self-evaluations when they have violated what they perceive to be a group prohibition. People who depend more on their own standards than the opinions of others are less likely to be upset or to suffer the same loss of self-esteem if they had done something that others would think wrong, if they themselves considered the behavior acceptable. In terms of theories of guilt and shame, those who are oriented towards others' opinions are more likely to suffer shame at a perceived violation of group standards, while those oriented to their own opinions are less likely to suffer shame when behaving differently from group expectations, but will be more likely to suffer guilt at the violation of their

internal standards.

A third factor determining the effect on self-esteem of a perceived violation of a reference group more is the importance of that behavior to the person's self-concept. Coopersmith stated that, ". . . it is possible for an individual to attain notable success in an area that he does not regard as important, such as competence, and thus conclude he is unworthy because he has not succeeded by the criterion he most values, such as virtue. Thus a man who is extremely capable in performing his occupation may nonetheless conclude that he is not successful because he does not fulfill the precepts he considers to be of major importance" (Coopersmith, 1967, p. 39).

From her research in the late 1950's, Douvan speculated that there is a sex difference in the importance of any reference group values to the self-evaluation of adolescents. She found that adolescent boys tended to use peer norms in their rebellion against parental authority, to help them separate and form independent identities. Adolescent girls, however, were more likely to acquiesce to parental rules and to rely on externally controlled standards to regulate their actions. As opposed to that of the adolescent boy, the peer group of the adolescent female was likely to be close in values to her parents, and the girl continued to strive for the approval of both groups (Douvan & Adelson, 1966).

According to Douvan, the theoretical reason for this difference between adolescent girls and boys is that girls are less motivated by internal controls. Instead, their behavior is dictated by a fear of loss of love or a sense of shame. Girls' identities are more closely tied to the approval of significant others than to their internal standards. Douvan related this idea to the cultural expectation that the most important goal for the female is marriage and motherhood. How well she is able to perform depends to a large extent on her meeting the expectations of an as yet unknown mate. By the age of 18, the girl has usually turned more to boys for intimacy and away from her feminine peer group (Douvan, 1960; Douvan & Adelson, 1966). Of course, it must be remembered that these theories are based on research done in the late 50's, and it is unclear how cultural values and expectations concerning females have changed since then.

In discussing the influence of reference groups on the individual, theorists have suggested that particular reference groups may influence different specific behaviors (Merton & Kitt, 1950). Douvan said that the peer group can even influence the adolescent's parents to change their values, especially in such relatively non-important areas as dress and hairstyle. However, she felt that the influence of the peer group, particularly for adolescent girls, is mainly in encapsulated, superficial areas. On most topics

there was little conflict between the values of adolescent girls' parents and peers (Ibid.).

Sexual Behavior

Sexuality is one of the most central parts of the adult person's self-concept. Erikson (1950) reported that when Freud was asked what he thought a normal adult ought to be able to do well, he replied, "lieben und arbeiten" (love and work) (p. 265). According to Erikson, the emotional task of young adulthood is the achievement of "intimacy versus isolation" (Ibid.). The implication is that sexual energy is not used as an end in itself by the mature individual, but needs to be harnessed in such a way that it becomes a true exchange with another human being. To him, the way people behave sexually is strongly related to basic feelings about themselves and others. The behavior itself is less important than the circumstances in which it is evinced.

Sexual behavior has enormous symbolic meaning in every society and is always regulated in some consistent fashion. Jessor and Jessor (1975) pointed out that in all cultures the change from virgin to non-virgin involves a concomitant change in status. Although the exact significance, timing, and acceptable techniques vary from culture to culture, sexual intercourse always implies transition from childhood to adulthood.

Although this change of status is present in every society, the conditions under which sexual intercourse and other forms of sexual expression take place can differ greatly from culture to culture. Ford and Beach (1951) observed, "Human sexual responses are not instinctive in the sense of being determined exclusively by the actions of genes or chromosomes. On the contrary, from the first years of life every child is taught about sex, either directly or indirectly. And most significant is the fact that different cultures teach different lessons in that regard" (p. 2).

In the contemporary American culture, sexual behavior has an importance which is far greater than any other rite of passage to adulthood. This society is among the most restrictive in terms of permissible sexual behavior. According to Ford and Beach (1951), sexual activity in a given society is patterned by both the prohibitions and opportunities provided by the culture. American society is one of the very few where both extramarital and premarital relations are disapproved and where monogamy is also practiced exclusively.

The expressed values of a society concerning sexual behavior may be different from the implicit ones, however. For example, in Bena society in Africa extramarital liaisons are "officially" prohibited. In fact, there are no penalties invoked for the violation of this rule, and most

married people in this society do actually have such liaisons (Ford & Beach, 1951). In America, it seems clear that although the explicit rules forbidding premarital sexual intercourse have changed very little in the past twenty years, the implicit values reflected in the attitudes and behavior of the unmarried college woman at least, have undergone a profound shift (Reiss, 1979; Chilman, 1979, etc.). In 1958, only 7% of college females reported that they felt that sexual intercourse was all right if the couple was engaged (Reiss, 1967). In 1973, 86% of the college females surveyed approved of intercourse if a couple was to be married, and 34% felt it was all right as long as the two people felt affection for each other (Delamater & MacCorquodale, 1979). Premarital sexual intercourse has become the norm for college women by graduation (Ibid., 1979; Hopkins, 1977). Although the expressed attitudes of adults over 30 have not undergone as great a change, it seems likely that implicit rules have changed since 1970. The current unstated conventions among adult middle class white Americans seem to be that premarital sexual intercourse will be tolerated under the following conditions: (1) Parents or married adults not in the person's peer group have no direct knowledge of the behavior; (2) The persons involved are over 18 and no longer attending high school; and (3) Intercourse takes place in what is interpreted by the participants as a love relationship.

Women and Sexuality

Many theorists believe that sexual activities have a different meaning for women and men. Douvan and Adelson (1966) reported that adolescent females tend to be closer to their parents and more identified with them than adolescent males are. Sex for women seems to be more of a means of affirming that they are loved than an end in itself. This closeness to parents and parental values apparently has minimal effect on the actual sexual behavior of young women. In describing the premarital sexual activity of adolescent Israeli girls, Antonovsky et al. (1978) said that although girls from traditional homes have intercourse somewhat less than their peers from modern families, having had intercourse once is far more predictive of future intercourse than the type of family the girl has. Bell (1966) said, "It is probable that most parents assume that their children, especially their daughters, accept the traditional restrictive values about premarital sexual behavior unless they are forced to do otherwise" (p. 37). However, he added, in actual fact it is the youth group and not the parents who define appropriate sexual behavior for their age mates.

Maccoby disagreed with Douvan about girls being more socially oriented than boys. She said that girls are less suggestible than boys and more likely in case of a conflict to follow their own values rather than looking to others (Maccoby & Jacklin, 1975). There is contradictory evidence

in this regard concerning sexual behavior. Mirande (1968) claimed that in his sample college females were more influenced in their sexual behavior than males by social factors. Most other studies found men to be more peer oriented in their sexual behavior and women more influenced by the degree of permissiveness of their own attitudes (Clayton, 1972; Libby, Gray, & White, 1978; and Teevan, 1972). Pre-1970's studies indicate that females at that time felt that their peers generally disapproved of sexual intercourse for unmarried females, and saw little peer support for such behavior (Reiss, 1967).

Statistics have clearly shown that the premarital sexual behaviors and attitudes of women have undergone a profound change in the past twenty years. This change is far more pronounced for women than for men (Bell & Coughy, 1980; Chilman, 1979; Walsh, Ferrell, & Tolone, 1976). Women have become more permissive, both in attitudes and behavior. Men, if anything, have become slightly less permissive of sexual activity, reflecting a loss of the double standard for men and women among the college generation (Reiss, 1967; Clayton & Bokemeier, 1980). In 1953, Kinsey found a self-reported 20% incidence of premarital intercourse among 20 year old college women (Kinsey et al., 1953). For the same year, Ehrmann (1959) stated a 14% self-reported premarital intercourse rate among 18 to 22 year old college women. In 1973, Jessor and Jessor (with a 50% sample loss)

found that 85% of senior college women across the country had had premarital intercourse. The Playboy Magazine study in 1976 found that 76% of college females country-wide had had premarital intercourse. Even within more restrictive religious groups, there has been a change in sexual behavior. In 1958, 9.5% of females attending a Mormon college said they had had intercourse, as compared to 32.4% in 1968 (Christensen, 1969).

A comparable change is reflected in attitudes. In 1959 a study showed that 17% of college females accepted premarital intercourse for women (Reiss, 1967). In 1961 Bell and Buerkle found that 55% of their college woman sample felt it was "very wrong" for a "girl not to be a virgin before she marries." Only 13% thought it was "right in many situations." Twelve years later, another college study reported that 87% of college women felt that premarital sexual intercourse was all right for females. Thirty-one per cent of them felt that premarital intercourse was all right without affection "if both want it" (italics mine) (Delamater & MacCorquodale, 1979).

How should these rapid changes in attitudes and behaviors affect the self-esteem of women? The primary importance to every culture of the regulation and timing of sexual behavior has already been discussed. These rules are passed between generations as cultural values. Deviations from cultural values held by significant others or

reference groups result in guilt, shame or anxiety. Any of these negative emotions create at least a temporary loss of self-esteem (Sullivan, 1953). However, whether or not guilt, shame, or anxiety are evoked by a given behavior depends on two other factors: (1) Whether the behavior is perceived to be in violation of either an internalized value or the standard of a person or group felt to be important to the individual; and (2) The importance of the perceived violation to the self-system.

Because of the centrality of sexual behavior to any culture, a felt violation of rules in this regard should have sufficient importance to the individual to result in a self-esteem loss. Prediction of direction of results in 1960 would have been clear: college women who had had premarital sexual intercourse, especially with more than one partner, should have lower self-esteem scores than those who were still virgins. By 1976, the prediction was by no means as clear or unidimensional. Since it is apparent that premarital intercourse no longer carries the stigma for females that it has even in the recent past, the meaning to the woman's self-percept of having sexual relations prior to marriage must have changed also. It is not yet clear, however, what the new meanings of such behaviors are.

Given the rapid change of attitudes about premarital sexual activity, whether a given behavior is felt to be a violation of an internalized or reference group value is

much more open to individual interpretation and variation. It seems likely, particularly in the case of present day college women, that the attitudes of parents concerning their daughters' sexual behavior are much more conservative than the attitudes of the daughters' peers. In fact, it is most likely that among peers non-virginity is a positive value for college women, while parents still maintain quite negative attitudes (Chilman, 1979). In order to maintain a good self-concept, those with high self-esteem would either have to separate themselves from a group with different values from their own, or perceive that groups' values as close to their own, whether or not that is in fact the case. People with low self-esteem, however, are more likely to feel that their behavior violates standards of those people who are important to them.

List of Hypotheses

A. Parental Values and Relationships

- 1) The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her parents' sexual values.
- 2) The effect on self-esteem of parent-child differences as hypothesized above will decrease with increasing age and year in college.
- 3) The effect on self-esteem of parent-child differences will increase as a function of closeness of the subject to

her parents.

4) The effect on self-esteem of parent-child differences will increase as a function of external locus of control and decrease as a function of internal locus of control of the subject.

B. Friends' Behavior and Relationships

5) The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her friends' sexual behavior.

6) If the subject believes her friends to be involved sexually in more intimate behaviors than she is, the effect on her self-esteem of this difference will increase with her increasing age and year in college.

7) The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of the closeness of the subject to her friends.

8) The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of external locus of control and decrease as a function of internal locus of control of the subject.

C. Relationship of Subject to Friends and Parents

9) An association has been predicted between the subject's self-esteem and two similarity scores: the first, between

the subject's reported sexual behavior and her perception of her parents' sexual values, and the second, between the subject's reported sexual behavior and her perception of her friends' sexual behavior. The size of the relationship between the subject's self-esteem and each similarity score will vary directly with the subject's relative closeness to each of these reference groups.

D. Other Variables

10) The self-esteem of the subject is directly related to the similarity of her sexual attitudes to her reported sexual behavior.

11) The self-esteem of the subject is inversely related to the absolute difference between the subject's reported age at first intercourse and the median age of reported first intercourse of the sample.

Explanation of Individual Hypotheses

HYPOTHESIS 1: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her parents' sexual values.

The subject's "reported sexual behavior" refers to a combination of the most intimate sexual activity in which the subject says she has engaged in her lifetime and the age at which she reports the behavior first occurred. Both age and activity are taken into account, because it seems clear

that societal proscriptions against sexual intimacy lessen with the advancing age of the individual concerned. Jessor and Jessor (1975) defined deviant behavior as age prescribed activities done out of their appropriate stage. Changes in both attitudes towards sexuality and sexual behaviors are consistently found to be age-related (Reiss, 1967; Delamater & MacCorquodale, 1979).

"Parents' sexual values" refers to the liberalism or conservatism of parental attitudes towards sexual behavior. Liberalism or conservatism is assumed to be a function both of the kind of belief expressed about sex, and also the frequency with which sex was a conversational topic in the home. Davis (1974) found that among sexually experienced adolescents, degree of experience was related to whether sex was a topic which was openly discussed in the family. Parental attitudes are viewed as an entity, rather than separated into mother's and father's views. Acock and Bengstrom (1980) found that although parents actually agreed very little on their attitudes, their late adolescent children perceived them to be in almost complete agreement. In a previous study (1978), they found that combining perceptions of parental opinions yielded higher predictability to offspring attitudes than looking at each parent separately. In a study of parental power, McDonald (1980) found that females tended to identify equally with both parents, while males identified more with the father.

Parental values about sexuality are currently important for the college female in at least two ways. First, the parents' attitudes about sexual behavior are conveyed to the child from infancy. These values are incorporated into the self-system of the child early in life as a part of identification with the parents and continue to exert a meaningful influence on both behavior and feelings about the self. When the behavior of the late adolescent deviates from these built in standards, feeling of guilt should develop, resulting in a concomitant loss of self-esteem. The further the behavior is from these standards, the stronger the guilt and the greater the self-esteem loss.

Second, parental standards continue to exert a direct influence on the college student, even though parent and child are physically separated. Studies have shown a curvilinear relationship between parental influence and the age of the adolescent, with the values and opinions of parents lessening in importance to the adolescent from seventh through tenth grade and then becoming of greater consequence towards the end of high school (Douvan, 1960; South & Floyd, 1971; Young & Ferguson, 1979). O'Donnell (1976), studying eighth and eleventh graders found no great shift in orientation away from from parents to peers; in fact he found that parents continued to exert more influence than peers. The child's self-esteem, he discovered, was significantly related to good feelings towards both groups.

When the adolescent goes to college, continued contact is ordinarily maintained with the parents, who are still an important reference group for the almost-adult offspring. They are usually interested in the social life of the collegian, and often make their attitudes about sexual behavior in college known to the child. If the college student then behaves sexually in a way which is perceived to invoke parental disapproval, the person should experience shame and a loss of self-esteem. The further the behavior from what is believed to be acceptable according to parental standards, the greater the reduction in self-esteem.

In this study, the subject's perception of the parents' opinions and values are being investigated, rather than actual parental standards. According to behavioral theory, the actual opinions of the parents should affect the behavior of children. However, according to cognitive theory it is the opinions attributed to parents by children which affect their behavior. In a study of perceived political beliefs, Acock and Bengstrom (1980) demonstrated that the level of accuracy of adolescents' perception of parental attitudes was very low. Adolescents of both sexes thought their parents believed in very different values from their peers, and reacted in terms of the perceived reality, not their parents' actual opinions.

Many studies of sexual behavior and attitudes of adolescents and college students report no correlation with

directly measured parental attitudes (Kelley, 1978). However, significant relationships have been found between the perception of parental attitudes and the students' own sexual attitudes and behavior (Libby, Gray, & White, 1978; Walsh, 1972).

HYPOTHESIS 2: The effect on self-esteem of parent-child differences as hypothesized above will decrease with increasing age and year in college.

College is a time of transition from dependence to independence. Bell and Buerkle (1962) spoke of a "launching stage," referring to a period of transition from adolescence to adulthood, involving often incompatible expectations about behavior held by parents and children. Each year the young woman is away from home diminishes parental influence over her feelings about herself, regardless of how close she still feels to her parents. Mention has already been made of studies which show that as adolescents approach adulthood, they increasingly trust their own judgment to make decisions about behavior (Curtis, 1975; Constanzo & Shaw, 1966). A difference of opinion over values which seems of immense importance to an 18 year old freshman is likely to affect a 22 year old senior much less.

HYPOTHESIS 3: The effect on self-esteem of parent-child differences will increase as a function of closeness of the subject to her parents.

"Closeness" refers both to continuing contact with the parent and to the subject's expressed wish to be like the parent in some way. Reference groups affect the individual's self-evaluation only to the extent to which the person feels close to or affected by that group. The behavioral boundaries set by a reference group are relevant only in relationship to the group's importance to the individual. Erikson, speaking of a child who had been shunned by a group, said, "Occasionally he may turn things around, become secretly oblivious to the opinions of others and consider evil only the fact that they exist" (Erikson, 1968, p. 110). Sullivan said, "Anxiety, as a phenomenon of relatively adult life, can often be explained plausibly as anticipated unfavorable appraisal of one's current activity by someone whose opinion is significant" (Sullivan, 1953, p. 113).

The interactional nature of the relationship between closeness to parents, anticipation of their disapproval of behavior, and self-esteem makes logical sense. In defining self-esteem, the assumption was made that there is a drive to maintain a positive self-evaluation. The student who is close to her parents and who feels that her sexual behavior violates their standards should suffer a loss of a self-esteem. Therefore, to protect a positive self-evaluation, she may interact less with her parents.

The hypothesis has indirect confirmation from the literature. A positive correlation was found between the

self-esteem of children and the closeness they felt to their parents (Coopersmith, 1967; O'Donnell, 1976). Delamater and MacCorquodale (1979) found that living with parents correlated negatively with lifetime sexual experience. They also learned that an affectionate relationship with parents was negatively related to lifetime sexual behavior. Reiss and Miller (1979) found that among both high school and college students, non-virgin respondents were less likely to be intimate with their parents. These studies suggest that the extent to which people are close to their parents affects the amount they respond to parental proscriptions about sexual behavior, and also that those who behave sexually in a way which violates parental standards are less likely to remain at home or to feel close to their parents.

HYPOTHESIS 4: The effect on self-esteem of parent-child differences will increase as a function of external locus of control and decrease as a function of internal locus of control.

Internal locus of control refers to the belief that what happens to a person depends on that individual's own abilities or actions. External locus of control refers to the belief that consequences are due to chance or external factors (Rotter, 1966). This has been interpreted to mean that those exhibiting internal locus of control depend more on themselves, while those exhibiting external locus of

control rely on the opinions of others. People who depend mostly on their internal value systems should experience less self-esteem loss if they behave differently from what they believe their parents wish them to do. On the other hand, those who believe that the results of their actions are controlled by others should feel more negatively about themselves if they violate the value system of those important to them.

Sex differences have been found on the total scores of locus of control scales, but the direction of those differences has varied from study to study. Sometimes females were found to have higher external locus of control scores than males and sometimes vice versa. However, Strickland and Haley (1980) found that regardless of total score, males and females responded differently to individual items, so that even if they received the same total score, the meaning of that score was different for each sex. After analyzing each item, they felt that for a female an "internal" evaluation would be most predictive of self-direction, while an "internal" score for a male would be more likely to predict to attempts to influence others. Since this study concerns females, the expectation is that scores on a locus of control scale will predict whether the subjects will be mainly attentive to their own values or whether reference group input will have more influence.

Delamater and MacCorquodale (1979) found a correlation between the sense of personal control (high "internal" scores) and sexual permissiveness among college students. They interpreted this finding to indicate that college students generally believe that society as a whole has conservative standards about premarital sexuality. Those who feel their destinies controlled by others are more likely to accept what they believe to be others' standards for their behavior.

HYPOTHESIS 5: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her friends' sexual behavior.

The importance of peers in determining adolescent behavior and attitudes has been demonstrated in reference group studies (Sherif & Sherif, 1964; Mirande, 1968; Teevan, 1972). This influence increases as college students leave home and interact less with their parents and more with their college classmates. Reisman and Jencks (1964) have described college as, "a human relocation project which removes a student from parents, community and employment to submerge him in the 'student's culture' of his adolescent peers." As part of what Merton and Kitt (1950) define as "anticipatory socialization," college students indulge in behaviors which in our society are forbidden to adolescents. These behaviors, of which premarital sexual intercourse is one, are labeled as conformist by college peers, but deviant

by parents (Teevan, 1972). Bell (1966) asserted that part of the reason the peer group takes on such great importance in regard to premarital sexual behavior is that parents are often embarrassed and will not discuss the topic or their values about it with their children. When they do, they are likely to make repressive statements about it which have little relevance for the adolescent's values. Reiss (1967) found that college students thought that their parents were low on sexual permissiveness, but that their peers were high on this dimension. Students rated their own attitudes as close to their peers. It has been demonstrated that students who perceived their friends as acting in a sexually permissive manner will be more likely to engage in coitus themselves, while those who perceived their friends as sexually inexperienced are more likely to be virgins (Mirande, 1968; Teevan, 1972; Schwartz & Baden, 1973). These data can be viewed either as an indication that people choose friends whose values and behaviors are similar to their own, or that their behaviors are influenced by those of their friends.

There appear to be sex differences in college student expectations concerning sexual behavior, both for their peers and themselves. According to Collins (1974), males expected more intimate sexual behavior than females on all dates except the first. Females tended to reserve any sexual expression more intimate than kissing or light petting

for affectional relationships. However, females expected their female peers to be engaging in greater sexual activity than they themselves were. Collins concluded that there is enormous pressure on college women towards greater sexual intimacy based both on the expectations of their male partners, and on the unrealistic perception that their female peers are involved in more sexually intimate behaviors than they themselves are. Feeling that one is behaving in a similar manner to one's friends should contribute to high self-esteem, while believing that one differs from one's friends in participation in sexual activities should lead to lower self-evaluation. Conversely, it is expected that lower self-esteem might cause a young woman to feel alienated and different from friends. It is also reasonable to suppose that pressure toward greater sexual activity based on the perception that friends are more sexually active than oneself, may create a lowered self-concept, whereas feeling more sexually active than friends may be considered at least acceptable and possibly enhancing to self-esteem.

HYPOTHESIS 6: If the subject believes her friends to be involved sexually in more intimate behaviors than she is, the effect on her self-esteem of this difference will increase with her increasing age and year in college.

The rapid changes in the past twenty years in sexual attitudes and behavior, particularly among college women,

have been discussed. By the time they graduated from college, over two-thirds of this sample of college women would have had intercourse, on the basis of probabilities from this sample and from other studies of similar samples done at the same time (D. Kallen, 1976; Chilman, 1979, etc.). Eighty-seven per cent of a similar sample of college women in 1973 said that premarital sexual intercourse was all right for women (Delamater & MacCorquodale, 1979). The question which has not been raised directly is whether sexual intercourse before marriage is now considered not only all right, but actually desirable among a college female population. It seems highly possible that non-virginity among college women is not only the norm in fact, but is also valued as a goal. If the sub-cultural more among college students is to be involved in premarital coitus, having sexual intercourse even when one's friends are celibate might be considered desirable rather than detrimental.

However, although non-virginity may be a relevant value to the majority of current college females, virginity clearly is not (Walsh, Ferrell, & Tolone, 1976; Reiss & Miller, 1979). The clear statistical expectation is that women will have had at least one experience of sexual intercourse by graduation. Especially if the young woman has friends who are more sexually experienced than she, her self-esteem would be expected to suffer more, the older and closer to graduation she is. Whether self-esteem would

suffer because of a violation of a group norm, or because the other positive aspects of sexual relationships are absent cannot be determined, but the resulting self-esteem loss should be similar.

HYPOTHESIS 7: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of the closeness of the subject to her friends.

"Closeness to friends" in this study will be represented by a continuum from belonging to a close-knit group of people who have a lot of contact with each other and who discuss sexual matters, to being socially isolated, with few intimate friends and little actual interaction. A person who has acquaintances but not intimate friends is less likely than one with close friends with whom she has frequent contacts to be affected by a comparison between her behavior and theirs. Schultz et al. (1977) found that friendship associations were more important than any other variable in determining the sex behavior of both college men and women. They found that each additional friend who was thought to be having intercourse increased the likelihood of the subject's having intercourse by 12-14% regardless of other factors. This impact should, however, vary with the closeness of the friends to the individual.

There is some evidence that late adolescent females are less close to peers of the same sex than the same age males. Females were found to be more likely to develop a

close relationship to a male partner and to draw away from female companionship (Douvan & Adelson, 1966). This might explain Clayton's (1972) finding that the perceived norms of peers regarding sexuality heavily influenced male college students in their sexual behavior, but had no significant relationship to the sexual behavior of females. Clayton reasoned that males' reference groups tend to reward sexual behaviors, but that females were less likely to disclose their sexual activities to their female friends for fear of negative sanctions. He also felt that males are more socialized to peer conformity than females.

According to reference group theory, individuals who have a group of close friends are more likely to conform to friends' behavior than those who are more alienated. The prediction in this hypothesis is that subjects who perceive their behavior as very different from that of their close friends will suffer a loss of self-esteem. On the other hand, subjects who do not have close friends are unlikely to care if their behavior differs from that of acquaintances. Also, people with high self-esteem are unlikely to retain as close friends people whom they feel to behave very differently from themselves in an area as important as sexuality.

As in Hypothesis 6, directionality of the difference in friend-subject behavior may be important. For example, closeness to friends may adversely affect self-esteem when

the person believes that her sexual behavior is less intimate than that of her friends, but may have no effect on self-esteem when she believes that her sexual behavior is more intimate than that of her friends.

HYPOTHESIS 8: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of external locus of control and decrease as a function of internal locus of control.

The reasoning in this hypothesis is the same as in Hypothesis 4, concerning subject-parent differences and internal-external locus of control. However, again, directionality of difference in friend-subject behavior may affect results. It is possible that external locus of control may relate to lower self-esteem only if the subject sees herself as less sexually active than her friends, whereas if she sees herself as more sexually active than her friends, external locus of control may relate to higher self-esteem.

HYPOTHESIS 9: An association has been predicted between the subject's self-esteem and two similarity scores: the first, between the subject's reported sexual behavior and her perception of her parents' sexual values, and the second, between the subject's reported sexual behavior and her perception of her friends' sexual behavior. The size of the relationship between the subject's self-esteem and each similarity score will vary directly

with the subject's relative closeness to each of these reference groups.

This hypothesis deals with the relative salience of a reference group for the individual. It predicts that the closer the person is to one or more reference groups, the more relevance that group has for her self-esteem. When the subject is close to both parents and friends, her self-esteem should be highly related to subject-parent and subject-friend similarity with regard to sexuality. If the subject is close to parents and not to her friends, her self-esteem should be highly related to the similarity between her sexual behavior and her parents' values about sexuality, but her self-esteem should not be related to subject-friend similarity. If the subject is close to friends but not to her parents, her self-esteem should be highly related to the similarity between her sexual behavior and that of her friends, but there should be no relationship between her self-esteem and subject-parent similarity. If the subject is not close to either her parents or to friends, then her self-esteem should not be related to perceived similarity to either group.

HYPOTHESIS 10: The self-esteem of the subject is directly related to the similarity of her sexual attitudes to her reported sexual behavior.

A common way of defining self-esteem is in terms of similarity between perceptions of the self and ideas about

what a person ought to be like, or an "ideal self." Presumably, the person whose behaviors reflect her values ought to have higher self-esteem than the person whose behaviors violate her own values. Ehrmann (1959) found the degree of sexual permissiveness highly related to sexual behavior in college students. He said that this relationship meant either that people will not ordinarily violate their personal codes or that they rationalize their behavior by changing their code to fit it. In an Israeli study, women from traditional homes tended to have a negative first intercourse experience. Although they usually continued to have intercourse, they continued to disapprove of such behavior (Antonovsky et al., 1978). In such circumstances, where there is a clear discrepancy between values and behavior, a lower self-evaluation would be expected.

HYPOTHESIS 11: The self-esteem of the subject is inversely related to the absolute difference between the subject's reported age at first intercourse and the median age of reported first intercourse of the sample.

It is expected that the further the individual's sexual behavior is from the group norm, the lower self-esteem. By the age of eighteen, or freshman year in college, approximately one-half of the females in the mid-1970's had had one intercourse experience (Chilman, 1979).

Mention has already been made of the expectation that the closer the subject is to college graduation the greater the loss of self-esteem because she is sexually inexperienced. At young ages, the converse is expected. Sexual intercourse is not yet a norm for younger adolescents, under fifteen years old, but is probably increasingly accepted among certain peer groups as the adolescent goes through high school. There are some data to indicate that sexual intercourse at a very young age is related to low self-esteem (Sorenson, 1972). The expectation here is that both the first and last groups to have intercourse will have the lowest self-esteem.

METHODS

Subjects

The data for this study were collected in the fall of 1976 by David Kallen at Michigan State University as part of a larger study of contraceptive use among college students. Subjects were a stratified random sample of 823 male and female never married undergraduate students. The final sample for the larger study consisted of 421 males and 402 females, aged 17 to 26, approximately equally distributed for year in school. The subjects for this study are the 402 females from the larger study.

Students chosen for the sample were sent a letter in which they were asked to participate. The letter was followed by a telephone call from the interviewer asking for a time for the interview. There was an eighty percent acceptance rate, very high for a sample of this sort. Refusals to participate were mainly on the grounds of lack of time (the interviews took from an hour and a half to five hours) or lack of interest. Female professional interviewers were used for all of the interviews. The length of the interview depended on the sexual experience of the subject. Reported lifetime sexual behavior and attitudes as well as reports of parents' attitudes and friends' behavior

were gathered by personal interview. The scales such as the self-esteem scale and the internal-external locus of control scale were administered by a written questionnaire given at the end of the interview. Although in the interview both forced choice and open ended questions were asked, only the answers to forced choice questions are being used in this study.

Measures

Self-Esteem

The measure of self-esteem consists of seven items, assumed to be integral parts of the self-image of most adult individuals, to be rated by the subject according to the importance of each item to the self-percept. The ratings are evaluations of attractiveness, interpersonal skills, decision-making capacity, and the self as a whole (Appendix A). The subjects rated each characteristic on a seven point scale from "Very Good" to "Very Bad," according to their current feelings about themselves. Subjects then weighed each characteristic except global self-evaluation on a seven-point scale from "Not at all Important" to "Very Important." Self-esteem score is the sum of the products of the weights and six items plus the global self-esteem item times seven. The mean score was 51.9, and the standard deviation was 36.4, showing a broad spread to the responses. The internal reliability of the scale, measured by Coefficient Alpha, is .83 (Cronbach, 1951).

The measure was validated against the Rosenberg Self-Esteem Scale, which was chosen for several reasons. First, it has been administered to a number of child, adolescent, and adult populations. Second, it is short and easy to administer and score. Third, there are validation studies relating the scale to other variables. The Rosenberg has been found to correlate .56 with judges' ratings of self-esteem. There is a positive relationship between self-esteem scores on the Rosenberg and sociometric ratings by others. Test-retest reliability is .85 (Rosenberg, 1965; Rosenberg & Simmons, 1971). Silber and Tippet (1965) compared four of the major self-esteem scales, including the Rosenberg, and found they correlated with each other from .56 to .81. In evaluating the Rosenberg, they found it a good measure of self-esteem, but felt that the highest scores might reflect defensiveness or the wish to maintain a good facade.

Rosenberg's (1965) definition of self-esteem as reflecting a global feeling of self-worth agrees to some extent with the definition used in this study. However, he chose to measure self-esteem by a scale which does not differentiate among aspects of the self, but inquires about good feelings about the person as a whole; for example, "I take a positive attitude towards myself."

Both the thirteen-item measure used in this study and the ten-item Rosenberg Self-Esteem Scale were

administered in groups to 135 undergraduate female psychology student volunteers. Single unweighted items, the whole unweighted scale, and the whole weighted scale were correlated with the Rosenberg Scale, scored as Rosenberg does, as a Guttman Scale. Not surprisingly, the largest correlation ($r=.64$), was between the Rosenberg as a whole and the single question of how good or bad the subject felt about "Myself as a Total Person." The correlation between the total of the seven unweighted characteristics with the whole Rosenberg was almost as large (.57). The correlation of the total weighted scale with the Rosenberg was virtually the same as the unweighted correlation (.54).

The weighted measure will be used for this study. Unlike the Rosenberg Scale, it involves more than a global self-evaluation. It is designed to tap various, heterogeneous aspects of the self. There is no reason to suppose that such divergent characteristics contribute equally to self-concept (Wells & Marwell, 1976, p. 102). Only the individual involved can decide the saliency of a single quality to an overall self-evaluation. Rosenberg (1965) said that when assessing a subject with regard to a number of different aspects, equal weight cannot be assigned to each. He said, ". . . each quality may not be equally important to the individual. He may care a great deal about certain qualities but not care in the least about others. It is thus of utmost importance to know the

individual's self-values" (p. 243). There is also an empirical basis for using weighted scores. Weighted scores produced a much greater spread of responses than unweighted scores. (Weighted score mean was 51.9, standard deviation, 39. Unweighted score mean was 36.5, standard deviation, 6.2.)

One of the seven self-esteem items is a self-rating of sexual attractiveness (Appendix A). Since many of the interpersonal variables being tested have to do with sexual behavior, the question arose about the inclusion of a self-rating of sexual attractiveness in the scale of self-esteem. Use of this item is defensible on the theoretical grounds that the way a young woman feels about herself as a sexual being is an important part of her total evaluation of herself. Although it appears likely that her evaluation of this aspect of herself is related to her sexual behavior, the question is open to empirical test. Feeling good about oneself from the standpoint of being sexually attractive is no more intrinsically related to sexual behavior than feeling oneself to be physically attractive is to entering a beauty contest. If one were studying the self-esteem of beauty contest entrants one would not eliminate feelings of physical attractiveness from that scale.

The relationship between the self-evaluation of sexual attractiveness and the rest of the self-esteem scale was studied. Removal of the sexual attractiveness rating

from the scale as a whole did not affect Alpha for the scale. Whole scale Alpha is .83. Removal of "Sexual Attractiveness" would make Alpha .82. Correlation of the item with the whole scale is .56 weighted by its importance to the individual, and .62 unweighted by importance. These correlations were similar to correlations of the other individual items to the whole scale. Therefore, "Sexual Attractiveness" was left in the scale.

Reported Sexual Behavior

Reported sexual behavior is a six-category Guttman Scale reflecting lifetime sexual activity. Categories on the scale are: (1) Never had a relationship with someone of the opposite sex, (2) Kissed someone of the opposite sex, (3) Engaged in light petting, (4) Engaged in heavy petting, (5) had first intercourse in college, (6) had first intercourse in high school (or earlier). The scale is distributed on a dimension of more conservative to more liberal sexual behavior. The liberal end is represented by sexual intercourse in high school, since that behavior indicates earlier participation in intimate activities than first intercourse in college. Most intimate lifetime sexual behavior was scored from 1 to 6, conservative to liberal. The information for these data was obtained by personal interview.

Mean reported sexual behavior for the sample was 4.3; standard deviation was 1.6. Frequencies are in Table 1.

TABLE 1

Frequencies of Reported Sexual Behavior

Lifetime Inti- macy Reported	Absolute Frequency (N)	Percent Frequency (%)	Cumulative Frequency (%)
1) No physical relationship	30	7.5	7.5
2) Kissing	39	9.7	17.2
3) Light Petting	45	11.2	28.4
4) Heavy Petting	58	14.4	42.8
5) Intercourse 1st in College	118	29.4	72.1
6) Intercourse 1st in High School	112	27.9	100.0
Total	<u>402</u>	<u>100.0</u>	<u>100.0</u>

Of the sample, 27.9% had had intercourse first in high school or earlier, and another 29.4% had had intercourse first in college. At the conservative end of the scale, 7.5% had neither dated nor had any form of physical relationship.

In forming scales to measure difference between reported sexual behavior and other behaviors and attitudes, scores on this scale were transformed into standard scores by means of a Z transformation, so that the differences between scale scores would be comparable.

Perception of Parental Values about Sexual Behavior

Items from two scales were combined to form a conservative-liberal scale of perceived parental attitudes towards sexual behavior (Appendix B). One of these scales was developed in the original Kallen study (1976), because it was found to form a separate factor involving the subjects' ideas about whether their parents endorsed certain "liberal" teachings about sex (Appendix B, first 4 items). The other three items consist of the subject's estimate of the conservatism or liberalism of each parent's attitudes towards sex, and a question about the frequency with which sex was a conversational topic in the home. The total parental value scale consists of seven items, each rated from conservative to liberal and added to form a total score. Items on this scale were tested for internal consistency using Coefficient Alpha. Alpha for the scale was .74. Scores on the scale were transformed to standard scores for comparison with subject's reported sexual behavior.

Closeness to Parents

The scale representing closeness to parents was originally to consist of five items (Appendix C). Two of these items reflect the extent to which the subject says she wishes to use her father or mother as models for herself. These items were originally combined, since, as mentioned above, research has shown that combining perceptions about

both parents yields higher predictability for children's attitudes than perception of the attitude of only one parent (Acock & Bengtstrom, 1978). The other three items refer to the amount of reported current contact with the parents. A Coefficient Alpha was computed for the five item scale as a whole. This was very low, .28. On examination, it appeared that the question about frequency of writing home was negatively correlated to the rest of the scale, $-.11$. Also, the two other parental contact items correlated .005 with the two parent modeling items, indicating that they were independent of each other. The decision was made to use two scales representing closeness to parents: (1) parental modeling, and (2) parental contact.

Parent Modeling: The first scale (Items 1 and 2 in Appendix C) represents the extent the subject says she would like to model herself after each parent. Alpha for this scale is still low, .39. Thus, it appears that there is no "modeling factor" which would cause a young woman to say that she would want to be like her parents, but that the choice represents an independent decision in the case of each parent. It was therefore decided to look separately at "mother modeling," "father modeling" and "parent modeling" in relation to self-esteem factors, to see whether, in fact, combining parents would increase predictability.

The two-item "Parent Modeling" scale was coded from 2 to 10, with 2 representing the greatest wish to be like

both parents, and 10 showing no desire to be like either one. Mean of the scale was 5.4, standard deviation, 2.1.

Parent Contact: Amount of parental contact should also affect the extent to which parental opinion has a currently salient effect on the subjects' self-esteem. The scale used to measure this consisted of items 3 and 4 in Appendix C (eliminating writing home as part of the scale). Subjects living at home received a rating of 2 for having the most parent contact. (Those subjects living with their parents had not been asked these questions.) Other scores ranged from 4, representing subjects who called and visited home most frequently, to 16 for those who had not either called or visited home in the preceding quarter. Mean for the scale was 9.4, standard deviation, 3.3. Alpha for the two-item scale was .61.

Internal-External Locus of Control

The Rotter Internal-External Locus of Control Scale was designed to measure whether someone believes that life changes are the result of personal effort or are based on chance or some factor beyond personal control (Rotter, 1966). The 1976 Kallen study contained eight items of the original 29-item Rotter Scale (Appendix D). These items were selected because of high individual correlations to the Rotter Scale as a whole. The 29-item Rotter Scale was administered by group to 135 undergraduate female volunteers from psychology courses. Coefficient Alpha for the 8-item

part scale was .65, while Alpha for the full scale was .79. The Pearson Correlation between the 8-item scale and the full scale was .86, evidence that the Kallen 8-item part scale is measuring the same factors as the Rotter Scale.

Individual items were scored 1 for internal locus of control and 2 for external locus of control. Items were added to arrive at a total score ranging from 8, highly internal, to 16, highly external. Mean score was 11.5, standard deviation, 1.9. Coefficient Alpha for the 8-item scale for this sample of 402 women was .83.

Perception of Friends' Sexual Behavior

This measure consists of three questions concerning friends' current sexual activities (Appendix E). The scale combines intimacy of activity and proportion of friends participating. Questions deal with proportions of friends dating, engaged in petting, and having intercourse. The question about petting was weighted double, and the question about sexual intercourse was weighted triple, since each involves a progressively more intimate sexual activity. The final range of scores was from 6 to 30, with 6 representing a low level of friends' sexual activity, and 30 representing a high level of activity. Mean was 20.1, standard deviation, 6.2. Coefficient Alpha for the scale was .63. The scale was transformed into standard scores for obtaining difference scores from the subject's own reported sexual behavior.

Closeness to Friends

This scale is composed of the answers to six questions about the total number of the subject's friends, number of close friends, whether they form a group, as well as the amount of time spent with friends and whether the subject discusses sex with them. Subjects responded on a modified Lickert Scale (Appendix F). Scores for each question were added. Range of scores was from 7 to 30. A score of 7 indicates membership in a group of close friends with whom the person spends much time and discusses sexual experiences. A score of 30 represents social isolation. Mean was 16.5, standard deviation, 4.1. Coefficient Alpha was .64.

Subject's Sexual Attitudes

The sexual attitude scale consists of answers to four questions on the written questionnaire (Appendix G). These items refer to permissible female sexual behavior at various stages of a social relationship. Answers to each question can carry from "No physical relationship" to "Inter-course" permissible. The items form a Guttman Scale from conservative to liberal attitudes. Coefficient of reproducibility of the scale is .92. Coefficient of scalability is .73. Scale scores were transformed to standard scores for comparison with subject's reported sexual behavior.

Procedures

HYPOTHESIS 1: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her parents' sexual values.

Analysis: Standards scores derived from the "reported Sexual Behavior" scale were subtracted from standard scores derived from the "Perception of Parental Values" Scale to obtain a measure of the difference between the subject's reported sexual behavior and her beliefs about her parents' attitudes about sex, on a conservative-liberal dimension. Both the direction and the degree of difference are assumed to be important. If the subject reports behaving in a sexually conservative manner, but perceives her parents as having liberal sexual beliefs, the effect on her self-esteem should be different than if she reports liberal sexual behavior and conservative parental beliefs. How different her behavior is from her idea of parental attitudes is also important. Both of these characteristics of the difference scores are accounted for using a Pearson Correlation to measure the relationship between the obtained difference score and the self-esteem scale score.

Therefore, as a test of the hypothesis, a Pearson Correlation was computed to measure the relationship between self-esteem and the subject-parent difference score. The expectation was that the larger the difference between the

subject's reported behavior and her perception of parental values, the lower her self-esteem. A negative correlation was expected between the difference score and the self-esteem score. In case the direction of the difference influences the effect of the degree of difference on self-esteem, the sample was divided into those who seem to be involved in less intimate sexual activities than their parents might sanction, and those involved in more intimate sexual behavior than they think their parents might approve. The amount of difference was then correlated with self-esteem. Again, the assumption was that the greater the difference, the lower self-esteem.

HYPOTHESIS 2: The effect on self-esteem of parent-child differences as hypothesized above will decrease with increasing age and year in college.

Analysis: To test this hypothesis, self-esteem and the difference score were correlated with the subject's age, and, in a separate analysis, with the subject's year in college, using multiple regression techniques.¹ In another analysis, subjects were divided according to year in school, and a Pearson Correlation computed between self-esteem and the difference score for each year. It was predicted that

¹In all of the statistical findings, age was so highly related to year in school that it was decided to use only year in school in reporting results.

the younger the subject, or the lower the year in college, the greater the (negative) correlation between self-esteem and parent-child difference. The older the subject or the further along in school, the less correlation is predicted between self-esteem and difference scores.

HYPOTHESIS 3: The effect on self-esteem of parent-child differences will increase as a function of closeness of the subject to her parents.

Analysis: To test this hypothesis, self-esteem was correlated with the parent-subject difference score, with parent contact, and with mother, father, and both-parent modeling variables using multiple regression. The sample was also divided according to amount of contact and modeling, and Pearson Correlations computed between self-esteem scores and parent-subject difference scores. The closer the subject is to her parents, either in terms of contact or wish to be like them, the larger is the expected (negative) correlation between self-esteem and parent-child differences. The more distant in terms of contact or wish to be like the parent, the less the relationship between self-esteem and parent-subject differences.

HYPOTHESIS 4: The effect on self-esteem of parent-child differences will increase as a function of external locus of control and decrease as a function of internal locus of control.

Analysis: Self-esteem was correlated with locus of control scores and parent-subject difference scores using multiple-

regression techniques. The sample was also divided into high internal, middle, and high external locus of control groups, and a Pearson Correlation calculated for self-esteem and parent-subject differences in each of the three groups. It was expected that the higher the external locus of control, the larger the (negative) correlation between self-esteem and parent-subject differences.

HYPOTHESIS 5: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her friends' sexual behavior.

Analysis: To test this hypothesis, standard scores derived from the "Reported Sexual Behavior" scale were subtracted from standard scores from the "Perception of Friends" "Sexual Behavior" scale, to obtain a measure of the difference between the subject's reported sexual behavior and her perception of her friends' sexual behavior. A Pearson Correlation was calculated to measure the relationship between self-esteem and the friend-subject difference score. The prediction was that the greater the difference, the lower the self-esteem of the subject. The sample was also divided into two groups: (1) Subjects who believed that they were involved in more sexually intimate activities than their friends, and, (2) those who believed that they were involved in the same or less sexually intimate

activities than their friends. Separate Pearson Correlations were then computed between the difference scores and self-esteem for each group. The prediction was that the (negative) correlation is higher for those who feel they are less sexually active than their friends than for the others.

HYPOTHESIS 6: If the subject believes her friends to be involved sexually in more intimate behaviors than she is, the effect on her self-esteem of this difference will increase with her increasing age and year in college.

Analysis: Only those subjects whose difference scores were zero or less were used to test this hypothesis. Multiple-regression correlated self-esteem with friend-subject difference and year in college. Subjects were also divided according to year in college and a Pearson Correlation calculated between self-esteem and the difference score for each year. It was expected that a (negative) correlation between self-esteem and friend-subject difference will be greater the higher the year in college, for those subjects who think they are less sexually experienced than their friends.

HYPOTHESIS 7: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of the closeness of the subject to her friends.

Analysis: Self-esteem was correlated with friend-subject difference and closeness to friends by multiple regression.

Multiple-regression equations were also used with a divided sample, part of whom felt they were equally or less sexually experienced than their friends, and the remainder who thought they were more sexually experienced than their friends. The multiple correlation of self-esteem with friend-subject difference and closeness to friends was measured for each group separately. Each group was then further subdivided into three more groups depending on closeness to friends. The (negative) correlation between self-esteem and friend-subject differences was expected to be greater the closer the subject is to her friends. It was further expected that the relationship would be stronger among subjects who felt less sexually experienced than their friends.

HYPOTHESIS 8: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of external locus of control and decrease as a function of internal locus of control.

Analysis: Using multiple regression, self-esteem was correlated with friend-subject differences and locus of control. The sample was again divided into those subjects who felt equally or less sexually experienced than their friends and those who felt more sexually experienced than their friends. The same multiple-regression analysis was made for the divided sample. The sample was then further subdivided into three more groups by locus of control, and a Pearson Correlation computed between self-esteem and friend-subject

difference for each of the six groups. The prediction was that the (negative) correlation between self-esteem and friend-subject difference would be stronger the more external the locus of control score. The predicted relationship was expected to be even stronger among those subjects who report less sexual experience than their friends.

HYPOTHESIS 9: An association has been predicted between the subject's self-esteem and two similarity scores: the first, between the subject's reported sexual behavior and her perception of her parents' sexual values, and the second, between the subject's reported sexual behavior and her perception of her friends' sexual behavior. The size of the relationship between the subject's self-esteem and each similarity score will vary directly with the subject's relative closeness to each of these reference groups.

Analysis: Subjects were divided into four cells according to closeness to parents (parent modeling) and closeness to friends. Groups were as equal in size as possible. The four cells consisted of (1) Subjects who were close to both parents and friends, (2) Subjects who were close to friends and not to parents, (3) Subjects who were close to parents and not to friends, and, (4) Subjects who were not close to parents or friends. Multiple correlations relating self-esteem with subject-parent and subject-friend differences were computed in each cell. Pearson Correlations between self-esteem and subject-parent differences, and between

self-esteem and subject-friend differences were also calculated for each group.

The greatest (negative) correlation was expected between self-esteem and both difference scores when the subject is close to both parents and friends. The lowest multiple correlation should appear in the cell where subjects are not close either to parents or to friends. In the 'Close to Parents,' 'Not Close to Friends' cell, there should be a large negative correlation between self-esteem and parent-subject difference, but no correlation between self-esteem and friend-subject difference. Conversely, in the 'Close to Friends,' 'Not close to Parents' cell, there should be a large negative correlation between self-esteem and friend-subject difference, but no correlation between self-esteem and parent-subject difference.

HYPOTHESIS 10: The self-esteem of the subject is directly related to the similarity of her sexual attitudes to her reported sexual behavior.

Analysis: Standard score for "Reported Sexual Behavior" was subtracted from standard score for "Sexual Attitude." A Pearson Correlation was calculated to determine the relationship between self-esteem and the difference score. The hypothesis predicts that the lower the difference between behavior and attitude, the higher self-esteem, so that a negative correlation between the two variables is expected.

HYPOTHESIS 11: The self-esteem of the subject is inversely related to the absolute difference between the subject's reported age at first intercourse and the median age of reported first intercourse of the sample.

Analysis: Median age of first intercourse was computed in two ways: (1) Virgins were dropped from the sample and median age of first intercourse was computed using only non-virgins. In this case only non-virgins were used for the comparison also. (2) Virgins were included in the analysis, but computed as if they had had intercourse first at the age of 24. (This age was chosen because it was a year older than the oldest woman in the sample.) In this second analysis, median age of first intercourse is a theoretical one, assuming that virgins will have intercourse later than the rest of the group. In both analyses, individual age at first intercourse was subtracted from median age at first intercourse. A Pearson Correlation was computed for the relationship between difference score and self-esteem. The hypothesis predicts that the greater the age difference for first intercourse between the subject and the sample, the lower self-esteem. Therefore, a negative relationship is expected between the difference score and self-esteem.

RESULTS

HYPOTHESIS 1: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her parents' sexual values.

This hypothesis is rejected. Correlation between the difference score and self-esteem is .03, non-significant. There appears to be no direct relationship between self-esteem and the degree of similarity between the young woman's sexual behavior and her parents' sexual attitudes, as measured by the scales used in this study. When the sample was divided according to direction of difference, being either less or more sexually active than parents would approve is not related to self-esteem ($r = -.01$ and $r = -.08$ respectively).

The subject's sexual behavior and her perceptions of parents' attitudes are individually correlated with self-esteem (Table 2). Since there is no correlation between reported sexual behavior and perceived parental attitudes towards sexuality (Table 3), each of these variables contribute independently to self-esteem. The more sexually experienced, the higher self-esteem tends to be. Also the more liberal the subject perceives her parents' sexual attitudes

TABLE 2

Pearson Correlations with Self-Esteem

Variable	r	p	N
Subject's Reported Sexual Behavior	.17	.001	395
Perceived Parental Attitude to Sex	.12	.007	391
Amount of Parent Contact	.10	.089 (N.S.)	326
Both Parents as Model	.11	.013	395
Mother as Model	.14	.003	395
Father as Model	.06	.163 (N.S.)	395
Reported Friends' Sexual Behavior	.11	.015	340
Closeness to Friends	.17	.005	326
Subject's Age	.12	.005	395
Subject's Year in School	.16	.001	395
*I-E Locus of Control	-.16	.001	389
Subject's Permissiveness	.10	.028	387
Age at First Intercourse	-.14	.015	225
**Age at First Intercourse	-.19	.001	395
Years since First Intercourse	.26	.001	215
Difference between Subject's Reported Sexual Behavior and Parents' Attitude Towards Sex	.03	.267 (N.S.)	391
Difference Between Subject's Reported Sexual Behavior and Perceived Friends' Sex Behavior	.02	.326 (N.S.)	340

*Locus of Control scored low (internal) to high (external). Negative correlation means internal locus related to higher self-esteem; external locus to lower self-esteem.

**Virgins given arbitrary age of 24 years old for first intercourse.

TABLE 3

Pearson Correlations with Reported Sexual Behavior

Variable	r	p	N
Self-Esteem	.17	.001	395
Perceived Parental Attitude toward Sexuality	-.01	.428 (N.S.)	398
Amount of Parent Contact	.16	.002	329
Both Parents as Model	-.19	.001	402
Mother as Model	-.17	.001	402
Father as Model	-.10	.030	373
Reported Friends' Sex Behavior	.48	.001	346
Closeness to Friends	.05	.248 (N.S.)	329
Subject's Age	.20	.001	402
Subject's Year in School	.20	.001	402
I-E Locus of Control	.02	.381 (N.S.)	395
Subject's Permissiveness	.39	.001	387

to be, the higher her self-esteem.

In the multiple-regression equation relating self-esteem to reported sexual behavior and perceived parental attitudes towards sexuality, the multiple correlation is .21 (Table 4). Both reported sexual behavior and parental attitudes contribute significantly to the correlation. Apparently parental pressure concerning sexual behavior as represented by the difference score is not relevant to the self-esteem of the college women in this sample. However, the subject's perception of the liberalism of her parents'

TABLE 4

Relationship of Self-Esteem to Subject's Reported Sexual Behavior and Subject's Perception of Liberality of Parents' Sexual Attitudes (N=367)

Variable	r	Multiple R
Reported Sexual Behavior	.16 (p=.002)	.21 (p=.001)
Parents' Sexual Attitudes	.14 (p=.006)	

views about sex is somewhat relevant to self-concept, which indicates that beliefs about parental attitudes have some effect on self-evaluation, even in college. Also, the more intimate the sexual activity of the subject, the higher self-esteem tends to be, regardless of belief about parental teachings. It appears, then, that it is not the parent-child difference, but a lack of conflict between current liberal norms of sexual behavior, parental values, and subject's sexual behavior which contributes to higher self-esteem. If the subject agrees with parental conservative sexual values and is involved in few sexual activities, she is in conflict with the current sexual values of the college population, and tends to feel worse about herself regardless of the similarity between her behavior and parental values.

HYPOTHESIS 2: The effect on self-esteem of parent-child differences as hypothesized above will decrease with increasing age and year in college.

This hypothesis was rejected. The effect on self-esteem of parent-child differences as measured is so slight

that it is not significantly affected by age or year in school (Table 5). When correlations between the difference score and self-esteem were computed separately for each year in school, again, none was statistically significant.

TABLE 5

Relationship of Self-Esteem to Subject-Parent
Difference Score* and Subject's
Year in School (N=391)

Variable	r	Multiple R
Subject-Parent Difference	.03 (p=.96, N.S.)	.16 (p=.005)
Year in School	.116 (p=.002)	

*Perceived parental attitude scale standard score subtracted from reported sexual behavior scale standard score.

By the time they reach college age, these young women no longer evaluate their sexual behavior through reference to what they think are their parents' values. If parental influence in this regard is already minimal, it cannot diminish further over time. However, both the subject's age and year in school are significantly related to self-esteem, with year in school showing a slightly higher relationship (Table 2). The older and further along in school these young women are, the better they tend to feel about themselves. Positive self-evaluation, then, seems related to maturity.

HYPOTHESIS 3: The effect on self-esteem of parent-child differences will increase as a function of closeness of the subject to her parents.

This hypothesis was rejected. "Closeness" was measured in two separate ways. The first method assessed the amount of recent parent contact. The second was the subject's judgment about the extent to which she would want to be "like" her mother and/or her father. But the initial effect of parent-child differences on self-esteem is so slight that it is not significantly affected by either parent contact or modeling (Table 6). When the sample was divided either by degree of parent contact or by degree of parent modeling, none of the correlations between the difference score and self-esteem were significant either.

TABLE 6

Relationship of Self-Esteem to Subject-Parent
Difference Scores*, Amount of Parent
Contact, and Parent Modeling (N=329)

Variable	r	Multiple R
Subject-Parent Difference	.03 (p=.549, N.S.)	
Parent Contact	.10 (p=.087, N.S.)	.16 (p=.046)
Parent Modeling	.12 (p=.027)	

*Perceived parental attitude standard score subtracted from reported sexual behavior standard score.

Neither the amount of parent contact nor the wish to use parents as models appears to have an important relationship to self-esteem for the sample (Table 2). However, wanting to be like the mother is significantly related to self-esteem, while wanting to be like the father is not (Table 2). A wish to identify with the same-sexed parent, then, has a relationship to positive self-concept even for these young adults. In the multiple correlation between mother modeling, sexual behavior, and self-esteem, both mother modeling and sexual behavior contribute equally (Table 7). It is also interesting to note that mother modeling is significantly inversely related to sexual behavior (Table 3).

TABLE 7

Relationship of Self-Esteem to Subject's
Reported Sexual Behavior and Mother Modeling (N=392)

Variable	r	Multiple R
Mother as Model	.14 (p=.001)	.24 (p=.001)
Reported Sexual Behavior	.17 (p=.001)	

HYPOTHESIS 4: The effect on self-esteem of parent-child differences will increase as a function of external locus of control and decrease as a function of internal locus of control.

Hypothesis 4 is not confirmed for the total sample. The effect on self-esteem of differences between the subject's sexual behavior and parental values about sexuality

is too slight over the whole sample to be significantly affected by locus of control. There is, however, a significant correlation between locus of control and self-esteem, with internal locus related to higher self-esteem and external locus related to lower self-esteem (Table 2). In a multiple-regression equation relating locus of control and subject-parent differences to self-esteem, the multiple correlation is significant solely on the basis of locus of control (Table 8), subject-parent differences contributing nothing to the relationship.

TABLE 8

Relationship of Self-Esteem to Internal-
External Locus of Control* and Subject-Parent
Difference Scores** (N=385)

Variable	r	Multiple R
Locus of Control*	-.16 (p=.002)	.16 (p=.007)
Subject-Parent Difference**	.02 (p=.70, N.S.)	

*Locus of control scored from Internal (low) to External (high). Negative correlation indicates high self-esteem is related to internal locus, low self-esteem to external locus.

**Perceived parental attitude standard score subtracted from reported sexual behavior standard score.

In a second multiple-regression equation relating reported sexual behavior and locus of control to self-esteem, the coefficient is .23 (Table 9). Both internal locus of control and greater sexual activity contribute equally to higher self-esteem.

TABLE 9

Relationship of Self-Esteem to Internal-
External Locus of Control* and Subject's Reported
Sexual Behavior (N=379)

Variable	r	Multiple R
Locus of Control*	-.16 (p=.001)	.23 (p=.001)
Reported Sexual Behavior	.16 (p=.001)	

*Locus of control scored from Internal (low) to External (high). Negative correlation indicates that high self-esteem is related to internal locus, low self-esteem to external locus.

In order to clarify the relationships involved in testing the hypothesis, the sample was divided according to direction of subject-parent difference. One group was involved in the same or less sexual activity than her perception of parental attitudes would lead one to interpret as permissible. The other group was involved in more sexual activity than parents would be likely to approve, and can be assumed to be violating the subject's idea of parental sanctions concerning sexual behavior. Locus of control does not significantly affect the relationship between self-esteem and size of subject-parent differences for those subjects involved in less sexual activity than they perceive their parents to approve (Table 10). That the correlations for this group are non-significant is to be expected, since they are not violating parental standards. However, in the group involved in sexual behavior which would appear to

TABLE 10

Pearson Correlation Between Self-Esteem and Subject-Parent Differences by Locus of Control and Direction of Difference

<u>Difference</u>	Locus of Control		
	Internal Locus	Middle Locus	External Locus
Zero or Less*	-.18 N=59 p=.08	.02 N=71 p=.43	-.07 N=51 p=.31
Greater than Zero*	.18 N=68 p=.07	.02 N=79 p=.44	-.32 N=63 p=.005

Chi-square for the whole table 10.12, significant between .05 and .10 (N.S.)

Chi-square only for "difference greater than zero" 8.64, significant at .02

*Standard scores of parental attitudes about sexuality subtracted from standard scores of subject's reported sex behavior.

violate their conception of parental standards, there is a correlation of $-.32$ between size of subject-parent difference and self-esteem for those with highly external locus of control, a correlation of $.02$ for those with middle locus, and a correlation of $+.18$ between difference scores and self-esteem for those with internal locus of control (Table 10). Chi-square for all six groups approaches significance ($p=.05-.10$). But for the three groups involved in more sexual behavior than would merit parental approval, chi-square is significant at less than $.02$, indicating that the correlations represent real differences.

Young women who feel that they have violated parental standards by excessive sexual activity and are mainly oriented towards the values of others apparently suffer lower self-esteem the further their sexual behavior is from perceived parental standards. Those young women who also report more sexual activity than they believe their parents would approve, but are mainly oriented towards internal standards, seem to derive some additional self-esteem from being different from parental standards. The data, therefore, suggest that Hypothesis 4 is only true for those young women who have violated what they consider to be parental standards of sexual behavior.

HYPOTHESIS 5: The self-esteem of the subject is directly related to the degree of similarity between her reported sexual behavior and her perception of her friends' sexual behavior.

When the sample is examined as a whole, the hypothesis is not confirmed. Pearson Correlation between self-esteem and friend-subject difference in sexual behavior is negligible. Absolute amount of difference regardless of direction also has a virtually zero correlation with self-esteem (Table 11). But, when the sample is divided into two groups, one of which perceives their own sexual behavior to be the same or less active than that of their friends, and the other which reports more sexual activities than friends, a difference appears between the two groups (Table 11). For those who report more sexual activity for

TABLE 11

Pearson Correlation Between Self-Esteem and Subject-Friend Differences in Sexual Behavior

Group	r	p	N
Whole Sample			
Difference (with sign)	.02	.326 (N.S.)	340
Absolute Difference	-.07	.063 (N.S.)	340
More Sex than Friends	.01	.370 (N.S.)	154
Same or Less Sex than Friends	-.15	.020	184

themselves than for their friends, there is again no relation between the amount of difference and self-esteem. However, for those who report the same or less involvement in sexually intimate activities than their friends, the correlation between degree of difference and self-esteem is significant (Table 11). Although this is a small relationship, it does indicate that there is some correspondence between feeling oneself to be less sexually active than one's friends and a lowered self-esteem in this sample of college women. Self-esteem does not seem to be affected, though, when the woman perceives herself to be more sexually active than her friends, regardless of the degree of difference.

HYPOTHESIS 6: If the subject believes her friends to be involved sexually in more intimate behaviors than she is, the effect on her self-esteem of this difference will

increase with her increasing age and year in college.

Although Table 11 shows a significant inverse relationship between self-esteem and the difference between the subject's and friends' sexual behavior when the subject thinks her friends are more sexually experienced than she, the prediction in this hypothesis, that the inverse correlation will increase with increasing age or year in school, is not confirmed. The sample used to test this hypothesis consisted of those young women who reported having approximately the same amount or less sexual experience than their friends. Table 12 shows Pearson Correlations between difference scores and self-esteem for subjects according to year in school. The sample sizes are small, so that none of the correlations is significant, and the direction of the coefficients is opposite from that predicted.

TABLE 12

Pearson Correlation Between Self-Esteem and Subject-Friend Difference in Sexual Behavior* by Year in School

Group	r	p	N
Freshmen	-.23	.081 (N.S.)	38
Sophomores	-.14	.177 (N.S.)	45
Juniors	-.16	.139 (N.S.)	45
Seniors	-.11	.203 (N.S.)	56

*Subject reports equal or less sexual behavior for herself than for friends.

A multiple regression equation was also computed for the same group for self-esteem with year in school and subject-friend difference in sexual behavior. The correlation is .21, significant at the .02 level, and each variable contributes equally to the variance (Table 13).

TABLE 13

Relationship of Self-Esteem to Subject-Friend
Difference in Sexual Behavior and
Subject's Year in School (N=184*)

Variable	r	Multiple R
Subject-Friend Difference*	-.15 (p=.05)	.21 (p=.02)
Year in School	.16 (p=.05)	

*Sample: Only those subjects who perceived their friends as equally or more sexually active than they themselves were.

HYPOTHESIS 7: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of the closeness of the subject to her friends.

This hypothesis is rejected. Although having close friends is directly related to self-esteem (Table 2), according to the multiple regression of self-esteem with closeness to friends and friend-subject difference in sexual behavior, friend-subject differences do not add anything to this relationship (Table 14). When the sample is divided into a group which reports the same or less sexual activity than friends, and one which reports more sexual activity than

TABLE 14

Relationship of Self-Esteem to Closeness to Friends
and Subject-Friend Difference in Sexual Behavior

<u>GROUP 1: Whole Sample (N=289)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Closeness to Friends	.17 (p=.005)	.17 (p=.02)
Subject-Friend Difference	-.03 (p=.951, N.S.)	
<u>GROUP 2: Reports Equal or Less Sexual Activity than Friends (N=188)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Closeness to Friends	.16 (p=.015)	.23 (p=.006)
Subject-Friend Difference	-.15 (p=.024)	
<u>GROUP 3: Reports more Sexual Activity than Friends (N=156)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Closeness to Friends	.23 (p=.004)	.23 (p=.004)
Subject-Friend Difference	.03 (p=.577, N.S.)	

friends, a different picture emerges (Table 14). For the group reporting less sexual activity than friends, self-esteem is related significantly both to having many close friends and to being similar to friends in sexual activity, whereas in the group which reports more sexual activity than friends, sexual similarity to friends appears to be unrelated to self-esteem, while having many close friends remains important.

To clarify these results, subjects were divided by report of greater or less sexual activity than friends and by closeness to friends. The correlations between self-esteem and differences in sexual behavior in each of the six groups can be seen in Table 15. Degree of closeness to friends makes no difference to the relationship of degree of friend-subject difference in sexual behavior and self-esteem for those who are involved in less sexual activities than their friends. For this group, self-esteem tends to be higher the more similar sexual behavior is to that of friends regardless of the number of close friends.

However, in the group which reports more sexual activity than friends, closeness to friends does seem to affect the relationship between self-esteem and friend-subject difference, although the differences are not statistically significant. There is a tendency for those with many close friends to feel better about themselves when their sexual behavior is similar to friends. However, those with few close friends tend to have a better self-concept when their sexual behavior is different from their friends. In Table 14, these reverse trends cancel each other so that it looks as if no relationship exists between the difference scores and self-esteem. Close friends are important to the self-esteem of both groups. However, it appears possible that for the group of women who are more sexually active than peers but have few close friends, self-

esteem is somewhat enhanced by feeling very much more sexually active than friends.

TABLE 15

Pearson Correlation Between Self-Esteem and Subject-Friend Difference in Sexual Behavior by Closeness to Friends and Direction of Difference

		Closeness to Friends		
		Close	Medium Close	Not Close
Subject-Friend Differ: Zero or Less*	$r=-.08$	$r=-.23$	$r=-.19$	
	N=75 $p=.256$ (N.S.)	N=63 $p=.034$	N=46 $p=.106$ (N.S.)	
Subject-Friend Differ: Greater than Zero*	$r=-.10$	$r=.02$	$r=.17$	
	N=55 $p=.234$ (N.S.)	N=63 $p=.426$ (N.S.)	N=38 $p=.146$ (n.S.)	

*Standard scores of reported friends' sexual behavior subtracted from standard scores of subject's reported sexual behavior.

HYPOTHESIS 8: The effect on self-esteem of friend-subject differences in sexual behavior will increase as a function of external locus of control and decrease as a function of internal locus of control.

This hypothesis is rejected. Although internal locus of control is significantly related to self-esteem, friend-subject differences do not add to this relationship (Table 16). Dividing the whole sample according to locus of control does not strengthen the relationship between subject-friend differences and self-esteem. (For those

TABLE 16

Relationship of Self-Esteem to Subject-Friend
Differences in Sexual Behavior and Internal-
External Locus of Control (N=289)

Variable	r	Multiple R
Subject-Friend Difference	-.03 (p=.74, N.S.)	.21 (p=.002)
Locus of Control*	-.21 (p=.002)	

*Locus of control is scored from Internal (low) to External (high). Negative correlation indicates that high self-esteem is more related to internal locus, low self-esteem to external locus.

with internal locus, $r=.02$, for those with external locus, $r=.03$.)

An additional prediction was made that when the subject had less sexual experience than her friends, the higher external locus, the stronger the inverse relationship between difference and self-esteem. Table 17 shows the sample divided into those who report equal or less sexual activity than their friends and those who report more sexual activity than friends. The sample was then further subdivided by locus of control scores. Correlations were then computed in each cell between self-esteem and friend-subject difference scores. Although the Pearson Correlation between difference score and self-esteem is significant in one case, the correlations do not change in the predicted direction; in fact, if anything, there is less relationship between friend-subject differences and self-esteem for those who have an external locus than for any other group.

TABLE 17

Pearson Correlation Between Self-Esteem and Subject-Friend Differences in Sexual Behavior by Direction of Difference and Locus of Control

Difference	Locus of Control		
	Internal Locus	Middle Locus	External Locus
Less Sex than Friends	$r = -.12$ $N = 55$ $p = .18$ (N.S.)	$r = -.27$ $N = 75$ $p = .009$	$r = .01$ $N = 54$ $p = .460$ (N.S.)
More Sex than Friends	$r = .10$ $N = 53$ $p = .23$ (N.S.)	$r = .13$ $N = 58$ $p = .156$ (N.S.)	$r = .02$ $N = 45$ $p = .426$ (N.S.)

HYPOTHESIS 9: An association has been predicted between the subject's self-esteem and two similarity scores: the first, between the subject's reported sexual behavior and her perception of her parents' sexual values, and the second, between the subject's reported sexual behavior and her perception of her friends' sexual behavior. The size of the relationship between the subject's self-esteem and each similarity score will vary directly with the subject's relative closeness to each of these reference groups.

This hypothesis is rejected. Multiple correlations between self-esteem, parent-subject similarity, and friend-subject similarity show no significant differences between groups. The prediction was that the group of subjects who felt closest to both parents and friends would be more

dependent on the opinions of each of these groups to maintain self-esteem, so that there would be the highest correlation between similarity scores and self-esteem for these subjects. If anything, the relationship was lowest for those subjects who felt close to both parents and friends (Table 18).

TABLE 18

Multiple Correlation of Self-Esteem with Absolute Parent-Subject Similarity and Absolute Friend-Subject Similarity by Parent-Modeling and Closeness to Friends

		Closeness to Friends	
		Close	Not Close
Parent Modeling	Like	$r=.07$ $N=105$ $p=.802$	$r=.26$ $N=61$ $p=.140$
	Not Like	$r=.23$ $N=98$ $p=.075$	$r=.14$ $N=72$ $p=.492$

Subject-parent similarity also seems to be unrelated to self-esteem along the dimensions of parent modeling or closeness to friends (Table 19). Table 20 shows a relative difference between groups when the sample is again divided by amount of parent modeling and closeness to friends. In this case friend-subject similarity and self-esteem does differ in the four cells. However, feeling close to both

TABLE 19

Pearson Correlation Between Self-Esteem and Absolute Parent-Subject Similarity by Parent-Modeling and Closeness to Friends

		Closeness to Friends	
		Close	Not Close
Parent Modeling	Like	$r=.00$ $N=105$ $p=.940$	$r=-.01$ $N=61$ $p=.880$
	Not Like	$r=.04$ $N=98$ $p=.983$	$r=.07$ $N=72$ $p=.610$

TABLE 20

Pearson Correlation Between Self-Esteem and Absolute Friend-Subject Similarity by Parent-Modeling and Closeness to Friends

		Closeness to Friends	
		Close	Not Close
Parent Modeling	Like	$r=.06$ $N=105$ $p=.507$	$r=.26$ $N=61$ $p=.049$
	Not Like	$r=.23$ $N=98$ $p=.205$	$r=.13$ $N=72$ $p=.309$

parents and friends does not increase the relationship. Instead, feeling close to one of the groups (parents or friends) does seem to significantly increase the probability that being similar to friends in sexual behavior raises self-esteem. When the subject is not close to either parents or friends, there is no significant relationship between self-esteem and friend-subject similarity. The meaning of the finding that similarity between friends' and subject's sexual behavior is significantly related to self-esteem only when the subject feels close to parents and distant from friends or vice versa is not clear.

HYPOTHESIS 10: The self-esteem of the subject is directly related to the similarity of her sexual attitudes to her reported sexual behavior.

This hypothesis is not rejected. The Pearson Correlation between self-esteem and similarity of sexual attitude to reported sexual behavior is significant at the .03 level and in the predicted direction. However, the relationship is so low ($r = -.10$) as to be unimportant. A difference between personal permissiveness and sexual behavior seems to have very little relationship to self-esteem.

On the assumption that those who were personally permissive but did not report much sexual activity might differ in self-esteem from those who violated personal standards by greater sexual activity than they thought

proper, a correlation was computed between directional difference and self-esteem. This was not significant ($r = -.07$, $p = .096$). But, permissiveness and sexual behavior correlate .39 (Table 3). The range of difference scores is also very small, indicating that for this sample sexual behavior agrees with the person's values about it, and the small differences which appear are simply not important.

HYPOTHESIS 11: The self-esteem of the subject is inversely related to the absolute difference between the subject's reported age at first intercourse and the median age of reported first intercourse of the sample.

This hypothesis is rejected. The absolute difference between age at first intercourse and median age of first intercourse of the sample is not significantly related to self-esteem (Table 21). When virgins are included in the calculation as having had intercourse first at 24 years of age, the absolute difference between sample age and median age is not significant (Table 21). However, when the direction of the difference is taken into account, so that what is being measured is age of first intercourse, there is an inverse relationship between age of first intercourse and self-esteem. This relationship is even stronger when virgins are included in the sample as if they would first have intercourse at age 24 (Table 22). Therefore, while difference from peers in age of first sexual intercourse does not affect self-esteem, higher self-esteem is

TABLE 21

Pearson Correlation Between Self-Esteem and Absolute
Difference Between Age of First Intercourse and Median
Age of First Intercourse of the Sample

Group	r	p	N
Non-Virgins Only	.05	.207 (N.S.)	225
Virgins Included (Age 24)	-.03	.241 (N.S.)	395

TABLE 22

Pearson Correlation Between Self-Esteem and
Age of First Intercourse

Group	r	p	N
Non-Virgins Only	-.15	.015	225
Virgins Included (Age 24)	-.19	.001	395

significantly related to earlier intercourse, and lower self-esteem to later first intercourse. Since, as will be seen in Table 23 in the next section, virgins as a group have lower self esteem than non-virgins, adding virgins to the group having first intercourse later in life increases the negative relationship. It is not, then, the comparison of sexual behavior with that of peers which is relevant for self-esteem, but other factors involved in earlier sexual activity. These findings will be discussed further in the following section.

Post-Hoc Findings

Contrary to prediction, reference group pressure as measured by parent-subject and friend-subject differences in sexual attitudes and behavior had little measurable influence on the subjects' self-esteem. On the other hand, most of the other measured variables which were expected to have an indirect effect on self-esteem through a modification of the effect of reference group pressure had a direct relationship to it (see correlations, Table 2). Some of these variables such as age, year in school, and locus of control are probably related to maturation and growing independence. Other psychosocial variables such as having a close group of friends, or wanting to be like one's parents, particularly the role model of the same sex, confirm the theory that the closer one feels to others, the better one feels about oneself (Sullivan, 1953; Erikson, 1968).

Variables which have a more direct relationship to sexuality than those just cited also turned out to have a small but significant effect on self-esteem. Parental influence on the young woman is represented by the finding that perceived liberalism of parental attitudes towards sexuality is somewhat related to self-esteem (Table 2). If this perception represents an internalization of parental sexual attitudes, then the more liberal the parental view, the less conflict the subject would feel with

prevailing peer group attitudes about sex. Lack of conflicting pressure about sexual expression should make it easier for the young woman to feel good about herself.

Another sex-related reference group variable with a small but statistically significant relationship to self-esteem is the subject's report of friends' sexual behavior (Table 2). The greater the proportion of friends reported as being involved in intimate sexual activity, the more likely the subject is to have higher self-esteem. Having a relatively large proportion of friends involved in intimate sexual activities may represent less conflict with prevailing norms of sexual behavior in the same way that more liberal parental attitudes towards sexuality would. However, there is also a great tendency for subjects to report that most of their friends are involved in similar sexual activities to themselves ($r=.48$, Table 3). This indicates either that people choose friends who tend to be at the same stage of sexual behavior as they themselves are, or that they at least believe their friends to be similar to themselves in sexual activity. This belief would also tend to reduce any internally felt peer pressure to change behavior.

Sexual Behavior and Self-Esteem

The subject's own sexual behavior is significantly related to self-esteem across the sample as a whole (Table 2). The more intimate the subject's sexual behavior, the higher her self-esteem tends to be. T-Test of the difference

between means of self-esteem for virgins vs. non-virgins is significant (Table 23).

TABLE 23

T-Test of Difference Between Means of Self-Esteem
Virgins vs. Non-Virgins

Group	N	Mean	S.D.	T-Value	p
Virgins	170	44.8	37.5	-.317	.002
Non-Virgins	225	57.2	39.4		

As a group, non-virgins have greater self-esteem than virgins in this sample. Those women who first had intercourse in high school or before also have significantly higher self-esteem scores than the rest of the sample, including those who first had intercourse in college (Table 24).

TABLE 24

T-Test of Difference Between Means of Self-Esteem:
First Intercourse Before College vs. Rest of Sample

Group	N	Mean	S.D.	T-Value	p
First Inter- course Before College	110	61.4	39.3	3.02	.006
Rest of Sample	285	48.3	38.4		

This self-esteem difference is open to several interpretations. The first is that girls who have intercourse first when they are high school age or younger (in this sample one subject reported having intercourse first

at eleven and another at twelve) may have done so out of neurotic needs for demonstrations of affection. If this were true, it would be expected that high self-esteem scores from this group would most likely represent a defensive need to see oneself or at least to present oneself in a particularly good light, rather than being a true estimate of self-worth. Examination of the data shows that this explanation is possible for some of those who have had first intercourse early, but not for all. Scattergrams show that those subjects who have had intercourse at age seventeen or earlier do as a group tend to fall at the high end of the spectrum of self-esteem scores (as would be expected from the correlation). However, there is a wide scatter of self-esteem scores, including some negative ones, in the group. Other items which might be expected to be given a defensively high rating along with self-esteem if a person were consciously or unconsciously "faking good" might be the report of the number of close friends, or the declaration of a wish to be like each parent. Although there is a positive but low relationship between these items and self-esteem in the sample as a whole, the relationship is lower for non-virgins than virgins. These data tend to cast doubt on the defensive nature of reported high self-esteem among those who have had intercourse earlier.

A different explanation can be made in terms of sample limitation. All of the subjects, whether or not they have had sexual intercourse previously, have proceeded to college. None of them are married or have children, although a few have had abortions. It can be assumed, then, that sexual activity has not had enormously disruptive consequences in terms of life goals. This sample does not include any young women who did not go on to college either as a direct or indirect result of early sexual activity. So, at least some of the young women whose self-esteem might be assumed to be lower as a result of early sexual intercourse are not studied here.

A third interpretation seems the most feasible. In 1960, when Douvan did her first study of adolescent girls, she found that the most outgoing and popular, as well as the most physically mature, were likely to have better self-concepts (pp. 229-261). Douvan reported nothing about early sexual experience; however, even if she had, its meaning would have been very different at that time. Given current cultural norms, it is very likely that the same young women whom Douvan generally characterized as "feminine" girls would today have earlier sexual experiences than less popular, later developers. If, as appears to be true, sexual intercourse is no longer enveloped in the negative sanctions of previous years, then self-esteem should not be adversely affected by early intercourse. Instead, the

positive aspects of being involved in a loving, sexual relationship should add to the already higher self-esteem of outgoing, popular, physically mature young women.

Factors Contributing to Self-Esteem:
Virgins vs. Non-Virgins

The correlation between self-esteem and sexual behavior is significant but not high (Table 2). Further examination of the data indicates that there are differences between virgins and non-virgins in terms of the factors involved in high self-esteem. Tables 25, 26, and 27 begin to elucidate the nature of the distinctions. In general, social relationships contribute heavily to the self-esteem of virgins, much more than for non-virgins. Looking at the individual correlations with self-esteem, number of close friends is significantly related to self-esteem for virgins and for the sample as a whole, but not for non-virgins (Table 25). Amount of parent contact, which has no relationship to self-esteem either in the whole sample or for non-virgins, is significantly related to self-esteem in virgins. Wanting to be like one's mother is important to the self-esteem of both virgins and non-virgins. As a group, these three variables seem to represent a need to maintain strong relationships and continuing contact with important reference group members in order for virgins to feel good about themselves. That this need is not as powerful in non-virgins can be seen in the multiple

TABLE 25

Pearson Correlations with Self-Esteem: Virgins, Non-Virgins, Whole Sample

Variable Name	Virgins		Non-Virgins		Whole Sample	
	r	p	r	p	r	p
Parent Contact	.15	.025	.08	.43 (N.S.)	.10	.089 (N.S.)
Closeness to Friends	.27	.001	.12	.259 (N.S.)	.17	.005
Mother Model	.19	.006	.17	.03	.14	.003
Locus of Control*	-.04	.284 (N.S.)	-.24	.003	-.16	.001
Year in School	.03	.330 (N.S.)	.21	.006	.16	.001
Perceived Parent Attitude	.12	.060 (N.S.)	.17	.03	.12	.007
Reported Sexual Behavior	.05	.234 (N.S.)	(Non-calculable--- no spread)		.17	.001
Friends' Sex Behavior	-.05	.284 (N.S.)	.12	.259 (N.S.)	.11	.015

*Locus of control scored low=internal; high=external locus.

TABLE 26

Relationship of Self-Esteem to Closeness to Friends, Parent
Contacts, and Mother Modeling, for Virgins and Non-Virgins

<u>GROUP 1: Virgins (N=165)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Closeness to Friends	.27 (p=.001)	
Parent Contact	.15 (p=.020)	
Mother Model	.20 (p=.048)	
		.37 (p=.001)
 <u>GROUP 2: Non-Virgins (N=223)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Closeness to Friends	.12 (p=.123, N.S.)	
Parent Contact	.05 (p=.643, N.S.)	
Mother Model	.16 (p=.024)	
		.20 (p=.054, N.S.)

TABLE 27

Relationship of Self-Esteem to Parent Attitudes Towards Sex,
Year in School, and Locus of Control
in Virgins and Non-Virgins

<u>Virgins (N=165)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Parent Attitude to Sex	.12 (p=.149, N.S.)	
Year in School	.03 (p=.492, N.S.)	
Locus of Control*	-.04 (p=.688, N.S.)	
		.14 (p=.440, N.S.)
 <u>Non-Virgins (N=223)</u>		
<u>Variable</u>	<u>r</u>	<u>Multiple R</u>
Parent Attitude to Sex	.15 (p=.036)	
Year in School	.19 (p=.029)	
Locus of Control*	-.24 (p=.001)	
		.32 (p=.001)

*Locus of control runs from internal (low score) to external (high score). Negative correlation means that internal locus relates to high self-esteem, external locus to low self-esteem.

correlations in Table 26. For virgins, the multiple correlation of self-esteem and closeness to friends, parent contacts, and mother modeling is .37, significant at the .001 level. For non-virgins, the correlation of these "social" factors and self-esteem is .20, non-significant. Significance of the difference between the two multiple correlations is .006.

A very different group of items contributes significantly to the self-esteem of non-virgins. Those variables which could be expected to relate to maturity and independence (year in school and locus of control) are significantly related to self-esteem in non-virgins, but not at all in virgins (Table 25). Liberalism of parents' views about sexuality is also more strongly related to self-esteem in non-virgins than in virgins. Their own sex behavior is not related to self-esteem in virgins, nor is friends' sex behavior significantly related to self-esteem for either group (Table 25).

Table 27 shows the relationship between self-esteem and year in school, locus of control, and liberalism of parents' attitudes towards sexuality for each group. (Friends' sexual behavior added nothing to either multiple regression, and non-virgins' reported sexual behavior could not be correlated because there was no spread.) In this comparison, the multiple correlation of the three variables, year in school, locus, and parent attitude, with self-esteem

was .14 for virgins. None of the individual items related significantly to self-esteem either. For non-virgins, however, the multiple correlation is .32, significant at .001. Each of the individual variables also related significantly to self-esteem. Difference between multiple correlations for the two groups was significant at the .004 level.

In this sample, then, virgins differ from non-virgins in terms of the elements which contribute to a positive self-evaluation. Social and parental contacts are important for virgins, but not non-virgins. Probably sexual partners become the most important reference group for non-virgins. Also, if sexual intercourse is part of a maturation process, giving up evaluating oneself in terms of numbers of friends or parental support may be additional evidence of growing independence. The data do not make clear whether feeling good about being older and more independent of others' values is part of readiness for intercourse, or whether, after being involved in a sexual relationship, the person judges herself more in terms of her maturity and the importance of her own values than before. It seems reasonable to assume, however, that intercourse usually means the establishment of a one-to-one exclusive relationship which lessens the importance of all other ties. As a "rite of passage" involving a change of status, sexual intercourse may also lead to an increased emphasis on the importance of maturity to the individual.

Self-Esteem and the Length of Time
Since First Intercourse

As a further investigation of the meaning of sexual intercourse to the maturation process, the data were examined to see whether elapsed time since first intercourse affected self-esteem. The correlation between number of years since first intercourse and self-esteem is .26 (Table 2). This is the highest correlation of a single variable with self-esteem in the study. Non-virgin subjects' age and year in school are related less strongly to self-esteem (Table 27). It appears, then, that regardless of age, the longer the person has been having intercourse, the better she feels about herself. In terms of self-concept, the rewards of having a sexual relationship seem to outweigh any negative sanctions.

These data differ from those collected during the same time period by William Simon, studying high school students. In his research, with the exception of seniors, high school girls who had had intercourse had lower self-esteem than those who were virgins (Personal communication, August, 1981). There are obvious differences between the two samples. First, it is likely that mores concerning intercourse are different among high school and college students. What seems not only acceptable but desirable from the vantage of someone in college may be unacceptable to a high school girl. A second important difference between the samples has to do with the fact that this study

involves only those girls who have gone on to college, while the Simon study included those who did not. There are likely to be social class differences between the samples which may affect values about intercourse, sexual behavior itself, and self-esteem.

It is also possible, however, that part of the difference between the two samples had to do with length of time since first intercourse. To examine the year by year relationship between sexual intercourse and self-esteem, the non-virgin sample was divided according to number of years since first intercourse. Table 28 shows the year-by-year mean self-esteem and compares it with mean self-esteem of the virgins in the sample.

TABLE 28

Mean Self-Esteem of Groups Varying by Time
Since First Intercourse

Group	Mean Self-Esteem	S.D.	N
Virgins	44.9	37.7	170
1st Intercourse less than 1 Year Ago	38.3	28.0	7
1st Intercourse 1-2 Years Ago	50.4	37.8	61
1st Intercourse 2-3 Years Ago	52.2	43.2	61
1st Intercourse 3-4 Years Ago	55.9	33.0	40
1st Intercourse 4 Years Ago or More	73.5	42.9	56

Of the total sample, nine subjects had had intercourse first since their last birthdays. Of those nine, self-esteem scores were only available for seven. Although this was too small a sample to yield more than suggestive results, the mean self-esteem score for this sample of seven appears lower than that of the sample of virgins (Table 28). These data, though non-significant, hint that in the first year following first intercourse there may be a drop in self-esteem, followed by a steady rise each year thereafter. By the second year following intercourse, self-esteem is higher than for virgins.

These results, based on the extremely small sample of college women in this sample who had first intercourse within less than a year of the study, make for interesting theoretical speculation. They could provide one explanation for the difference between these data and the Simon study, since a much larger proportion of his non-virgin sample would have had intercourse first within the year before his research was conducted. It would be interesting to compare his data on the basis of number of years since first intercourse. If this factor proves on further testing to represent a real difference in self-esteem, a likely explanation is that there are two opposing values which come into play when the young woman has intercourse for the first time. The first is a parental, societal prohibition against premarital intercourse which probably makes itself

felt as guilt, and results in an initial lowering of self-esteem. The second value is a positive one existing among the college peer culture (if not the high school one) which maintains that sexual intercourse before marriage is very desirable and indicates that the young woman is involved in a caring relationship. The longer the young woman continues to have intercourse, the greater the likelihood that its rewards in terms of intimacy, approval of another person, as well as peer approval, overcome any negative feelings. Certainly within the college population there is little reinforcement of the societal sanctions against intercourse, so that any guilt feelings should tend to extinguish over time.

SUMMARY AND CONCLUSIONS

The hypotheses in this study were based mainly on reference group theory. It was assumed that the way people feel about themselves is based at least in part on their perception of the success with which they meet the expectations of significant others in their environment in important areas of behavior. Sexual behavior, and specifically sexual intercourse, was chosen, since it represents a significant maturational step which is regulated in some fashion in every society. The effect of rapidly changing cultural norms about intercourse for unmarried women in this country was assumed to create differences in behavioral expectations between generations. It was expected that (1) parental pressure would be produced by a perceived difference between the subject's sexual behavior and parental attitudes towards sex, (2) peer pressure would result from a perceived difference between the subject's sexual behavior and friends' sexual behavior, and, (3) greater reference group pressure, represented by greater differences, would lead to lower self-esteem in the individual. This relationship was expected to be qualified by the amount of influence exerted by the parent and friend reference groups.

The effect of each group on the self-esteem of the individual was assumed to be modified by such factors as locus of control, amount of contact, felt closeness, and year in school. Discrepancies between the subjects' reported sexual behavior, their own values, and modal sexual behavior of peers was also predicted to relate to self-esteem.

Most of the hypotheses lacked support. It seems clear from the data that parental values about sexuality have very little current influence on the behavior or self-esteem of the subjects. It appears that, by the time they reach college, young women no longer judge themselves by comparing their behavior with parents' standards, at least in the area of sexuality. It seems likely that Douvan's work in 1960 and 1966, showing that girls are more influenced than boys by shame or fear of loss of love and therefore tend to conform to parental standards, is outdated with reference to sexual behavior. In this study, the effect of parental influence with regard to sexual behavior is evinced only among those subjects who have engaged in more intimate sexual activity than they think their parents would approve, and then only among those who are highly oriented towards the values of others. As a whole, subjects who feel they have violated parental sexual standards do not have lower self-esteem.

Difference between the subject's sexual behavior and perception of friends' sexual behavior also had a

disappointingly low relationship to self-esteem. As expected, if the subject was involved in more intimate sexual behaviors than her friends the amount of difference did not affect self-esteem. The only relationship between subject-friend difference and lowered self-esteem was found when the subject was engaged in less sexual activity than she thought her friends were. This finding does tend to confirm the theory that current college peer group pressure is in the direction of greater rather than less sexual activity. However, the relationships, though in the expected direction, were low and significant mainly because of the large sample. Higher year in school, if anything, lessened the influence of peers. External locus of control had no apparent effect on peer pressure. How close the subjects felt to friends appeared to make some difference to self-esteem when they were more sexually active than their friends. In that case, those with many close friends had higher self-esteem if they were more like their friends in sexual behavior, while those with few close friends felt better about themselves if they were a lot more sexually active than their peers.

It is theoretically possible that neither friends nor parents provide the relevant reference group standards for sexual behavior for college females, but that broader expectations of the peer culture or the media are involved. In that case it would not be what friends are doing sexually

which would be important to self-esteem, but whatever are thought to be current peer standards about sexual behavior. It is also likely, considering current relaxed sexual mores, that the most important significant other in terms of the meaning of sexual intimacy for self-esteem is the sexual partner. If the young woman is satisfying her partner's expectations for a sexual relationship, the rewards in terms of personal satisfaction and good feelings about the self may be strong enough to overcome negative self-esteem effects of other reference group pressure.

A partial explanation for the disappointing results may also be a problem with the difference scores themselves. The use of standard scores to compare data with different means and standard deviations is a statistical necessity. Unfortunately standard scores eliminate what, in the case of subjects' sexual behavior and their perceptions of parental sexual attitudes, represent real differences. It is most likely that, on a liberal-conservative dimension, mean subjects' sexual behavior is much more liberal than mean perception of parental sexual attitudes. However, this information is not directly available from the data, since the direct comparison was not made by the subjects. So, the actual discrepancy between student behavior and parental attitude can only be inferred, although the correlation between difference scores and other variables is estimated correctly from the data.

To a lesser extent, this same problem exists in the comparison between subjects' reported sexual behavior and their assessment of their friends' sexual activities. Part of the comparison is based on the subjects' estimates of the proportion of friends engaged in a given behavior (Appendix F). This measure is not directly comparable to the subjects' statements about their own sexual behavior either, although there is more theoretical justification for assuming that the means in each case would be closer on a liberal-conservative dimension than those of subject behavior and parental attitude. Results, then, which show differences in self-esteem when the subject is more sexually liberal or conservative than she thinks friends are, might be stronger if a more precise measure of difference were available.

The subject's own sexual attitudes as related to her behavior has a significant, but very small, relationship to self-esteem. The relationship is probably so small because the correlation between behavior and attitude is high, and there was not much discrepancy. Absolute difference between the subject's age of first intercourse and median age of first intercourse of the sample is not related to self-esteem. However, there is a significant relationship between age of first intercourse and self-esteem. The earlier first intercourse takes place, the higher self-esteem tends to be.

A further examination of this result indicated that it was less the age at first intercourse which was important to self-esteem, but more the number of years over which intercourse had been taking place. In the first months following first intercourse, there are indications that self-esteem may be lower, followed by year-by-year increases in mean self-esteem scores. Initial guilt feelings, representing a reaction to parental and societal sanctions against premarital intercourse, could explain an immediate drop in self-esteem. Positive self-feelings, engendered by involvement in intimate relationships and social encouragement from peers, are stronger and more important than guilt feelings the older the person and the longer she has been having intercourse. This is shown by the steady rise in self-esteem over time, significantly above that of virgins.

The characteristics which are important to self-esteem in virgins and non-virgins were found to be different. For virgins, social variables were more important to a good self-concept. Their self-esteem was positively related to more parent contacts, having many close friends and wishing to be like the same-sexed parent. This cluster of variables made no significant difference to the self-esteem of non-virgins. Characteristics important to their self-esteem were year in school and internal locus of control, representing maturation and independence.

These data are important because they help to clarify the role of premarital sexual intercourse in some segments of current society. They confirm that intercourse does involve role change and maturation. For those who had not yet had intercourse, closeness to parents and peers is important to good self-feelings. Once they have had intercourse, young women who are still tied to the values of others (represented by external locus of control) tend to feel worse about themselves, while those who are older and depend more on their own values (internal locus) feel better about themselves. The implication is that an important aspect of the meaning of sexual intercourse for these college women is as a milestone related to growing away from the need for involvement with parents and friends to feel good, and an increased value on independence.

Another implication of the findings is that parents' and friends' standards concerning desirable sexual behavior do appear to be entirely different. Parental values still seem to favor premarital abstinence, so that greater and earlier sexual activity results in a violation of parental standards, while less intimate sexual behavior does not. Peer standards about sexuality, in contrast, seem to demand earlier, more intimate sexual activity. The subject who is more sexually active than her friends seems to experience no discernable pressure to reduce her sexual activities. Only the subject who believes that she is

less sexually active than her friends tends to feel less good about herself, the greater the perceived discrepancy. Pressure towards greater sexual activity among college peers can also be inferred from the finding that it is not the difference in age of first intercourse between subject and peers which lowers self-esteem. Reduced self-esteem tends to occur only when first intercourse has taken place at a later age or not at all.

Implications for Future Research

It would be interesting to investigate further the implication from the data that there is a relationship between the act of sexual intercourse and emotional maturation. This relationship could be explored by investigating whether characteristics making a difference to self-esteem for virgins and non-virgins would show the same distinctions for high school students that they did for the college women in this study. Other related issues are whether the same maturation-intercourse relationship would exist for men, and whether the same variables would be important for the women in the sample several years later.

Another area for further investigation concerns the suggestive but not statistically significant finding that the subjects who had had first intercourse very recently tended to experience a loss of self-esteem. To determine whether there is a significant self-esteem drop immediately following intercourse, or whether it was an artifact of a

small sample, it would be necessary to study this phenomenon in a larger group. It should not be difficult to find a high school and college sample who had had intercourse first within a few months preceding the study and compare them to others for whom the time period had been longer, or who were still virgins. It would be helpful to administer a sex guilt questionnaire to see whether any lower self-esteem following first intercourse was related to guilt feelings. If the high school sample turned out to be different from the college sample in this regard, there would be broader implications for the current sanctions and standards about premarital intercourse as related to various age groups.

A third area of investigation is the meaning of higher self-esteem scores among those young women who had had first intercourse very early, prior to the age of fifteen. It would be helpful both for the understanding of the cultural meaning of early intercourse and for comprehension of the intricacies of self-esteem to discover whether high self-esteem scores among that group are a true reflection of good self-concept or represent a defensive attempt to look good both to themselves and to the investigators. The answer could be determined through the use of tests designed to show a need to answer positively to "socially desirable" items. If it does not appear that the increased self-esteem of these subjects is due to

defensiveness, many of the assumptions about psychological harm to the female resulting from very early first intercourse would have to be reexamined.

A follow-up to the present study investigating the same questions several years later would give insight into the meaning of later loss of virginity among those who were still virgins at the time of the study. Knowledge of the future of these women should help to reveal the meaning for self-esteem of choosing to remain a virgin. There have been a multitude of studies which list percentages of people having intercourse at various ages, discussing types of relationships, numbers of partners, etc., but very few which investigate the implications of sexual decisions in terms of the emotional effects on the individual.

APPENDIX A

Kallen Self-Esteem Scale

APPENDIX A: Kallen Self-Esteem Scale

People often feel good about some aspects of themselves and not so good about other aspects. Below are listed various aspects of the self. Please indicate how good or how bad you feel about that aspect of yourself right now. Mark the appropriate number on your answer sheet. Please notice that this scale has 7 choices for each aspect.

	<u>*Very Good</u>	<u>*Neutral</u>	<u>*Very Bad</u>
11. Physical attractiveness	1	4	7
12. Sexual attractiveness	1	4	7
13. Conversation skills	1	4	7
14. Ability to communicate emotions	1	4	7
15. Ability to make important decisions	1	4	7
16. Personality	1	4	7
17. Myself as a total person.	1	4	7

Now we want to know how important each of these aspects of yourself is in terms of you you feel about yourself as a total person. For example, you may feel good about your conversation skills but feel they are not important to how you feel about yourself as a total person. You may feel bad about your physical attractiveness and feel that it is important to how you feel about yourself as a total person. For each of these aspects of yourself, please indicate on the answer sheet how important it is for how you feel about yourself as a total person.

11
11

	<u>*Very Important</u>	<u>*Moderately Important</u>	<u>*Not at all Important</u>
18. Physical attractiveness	1	4	7
19. Sexual attractiveness	1	4	7
20. Conversation skills	1	4	7
21. Ability to communicate emotions	1	4	7
22. Ability to make important decisions	1	4	7
23. Personality	1	4	7

*Recodes: (Questions 11 to 17) "Very Bad" = -3; "Neutral" = 0; "Very Good" = +3
(Questions 18 to 23) "Not at all Important" = 1 to "Very Important" = 7

APPENDIX B

Parental Attitudes Towards Sexuality Scale

APPENDIX B

Parental Attitudes Towards Sexuality Scale

The first four items are indices of attitudes parents may have communicated to their children about sex. As part of the personal interview, subjects were asked whether these items were (1) Something Major, (2) Something Minor, or (3) Not Communicated to them by their parents.

Score: 3 = Major; 2 = Minor; 1 = Not Communicated

1. Sex is fun.
2. Sex is a good way of expressing your love for someone.
3. There is nothing wrong with sex before marriage if two people love each other.
4. Sex is like any other activity that is enjoyable.

The following 3 items, also asked as part of the personal interview are recoded so that 5=1, 4=2, 3=3, 2=4, 1=5, so that scoring is 1=conservative, 5=liberal.

5. In your opinion, how would you characterize your mother's viewpoint on sex? Would you say she was . . .

1. Very Liberal
2. Fairly Liberal
3. In the Middle
4. Fairly Conservative
5. Very Conservative

6. And how would you characterize your father's viewpoint on sex? Would you say he was . . .

1. Very Liberal
2. Fairly Liberal
3. In the Middle
4. Fairly Conservative
5. Very Conservative

7. When you were growing up, about how often would you say that sex was the subject of general family conversation? Would you say . . .

1. Very Often
2. Fairly Often
3. Sometimes
4. Seldom
5. Never

APPENDIX C

Closeness to Parents Scale

APPENDIX C

Closeness to Parents Scale

Parent Modeling (Questions 1 and 2)

*Items 1 and 2 are scaled from close to distant, on a scale of 1 to 5.

1. Thinking of now, how much do you want to become the kind of person your mother is?
 1. Very much like her
 2. Somewhat like her
 3. Neither like nor unlike her
 4. Somewhat unlike her
 5. Very unlike her
 6. Does not apply (no mother)
2. And how much do you want to become the kind of person your father is?
 1. Very much like him
 2. Somewhat like him
 3. Neither like nor unlike him
 4. Somewhat unlike him
 5. Very unlike him
 6. Does not apply (no father)

Parent Contact (Questions 3 and 4)

3. About how many times do you usually go home in a quarter?

1. Never	5. Four times
2. Once	6. Five times
3. Twice	7. Six or more times
4. Three times	
4. About how many times in the past month have you called home?

1. Never	5. Four times
2. Once	6. Five times
3. Twice	7. Six to ten times
4. Three times	8. More than 10 times
- **5. About how many times in the past month have you written home?

1. Never	5. Four times
2. Once	6. Five times
3. Twice	7. Six to ten times
4. Three times	8. More than ten times

*In final analysis, reverse scored, so that low score = little modeling.

**This question was dropped from the contact scale, because it had no relationship to other closeness items.

APPENDIX D

Internal-External Locus of Control Scale

APPENDIX D

Internal-External Locus of Control Scale

These questions were answered by written questionnaire. Internal answers are given a score of 1, external answers, 2. On questions 1, 4, and 7, 1=2, 2=1. Low score for the scale indicates internal locus of control, high score indicates external locus.

Below are a series of paired statements. For each pair, please circle the number of the statement that comes closest to your position. Choose one statement from each pair.

1. Many of the unhappy things in people's lives are partly due to bad luck.
2. People's misfortunes result from the mistakes they make.
1. The average citizen can have an influence in government decisions.
2. This world is run by the few people in power, and there is not much the little guy can do about it.
1. When I make plans, I am almost certain that I can make them work.
2. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
1. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
2. By taking an active part in political and social affairs, the people can control world events.
1. There is really no such thing as "luck."
2. Most people do not realize the extent to which their lives are controlled by accidental happenings.
1. With enough effort we can wipe out political corruption.
2. It is difficult for people to have much control over the things politicians do in office.
1. Many times I feel that I have little influence over the things that happen to me.
2. It is impossible for me to believe that chance or luck plays an important role in my life.
1. What happens to me is my own doing.
2. Sometimes I feel that I do not have enough control over the direction my life is taking.

APPENDIX E

Perception of Friends' Sexual Behavior

APPENDIX E

Perception of Friends' Sexual Behavior

The following three questions were part of the personal interview. Answers were reverse scored, with 5=1, 4=2, 3=3, 2=4, and 1=5. Answers to question 1 were weighted 1, answers to question 2 weighted 2, and answers to question 3 weighted 3. Highest score represents largest proportion of sexually experienced friends.

1. About what proportion of your friends date? Would you say . . .
 1. All of them
 2. More than half of them
 3. About half of them
 4. Less than half of them
 5. None of them
2. About what proportion of your friends engage in petting? Would you say . . .
 1. All of them
 2. More than half of them
 3. About half of them
 4. Less than half of them
 5. None of them
 6. (Don't know)
3. About what proportion of your friends have intercourse? Would you say . . .
 1. All of them
 2. More than half of them
 3. About half of them
 4. Less than half of them
 5. None of them
 6. (Don't know)

APPENDIX F

Closeness to Friends Scale

APPENDIX F

Closeness to Friends Scale

These questions were asked on the personal interview. Answers were scored from close to not close, with lower scores representing close contacts with friends.* Questions 2 and 5 were recoded so that 1=7, 2=6, 3=5, 4=4, 5=3, 6=2, 7=1, 8=8.

1. How many close friends would you say you have?
 1. A great many
 2. Many
 3. An average number
 4. Several
 5. A few
2. How many of them do you think of as close friends with whom you can discuss a personal problem?
 1. One
 2. Two
 3. Three
 4. Four
 5. Five
 6. Six
 7. Seven or more
 8. None of them
3. About what proportion of your friends are friends with each other?
 1. All of them
 2. More than half of them
 3. About half of them
 4. Less than half of them
 5. None of them
4. Since the beginning of fall term, please indicate the amount of time spent in activity. . . . Talking or doing things with friends
 1. A lot of time
 2. Quite a bit of time
 3. Average amount of time
 4. Not too much time
 5. Not much time at all
 6. (Does not apply)

*In the final analysis scores were reversed so that low scores = not close, high scores = close.

Closeness to Friends Scale (cont'd.)

5. How many of your friends know what you are doing sexually?

- | | |
|----------|------------------|
| 1. One | 5. Five |
| 2. Two | 6. Six |
| 3. Three | 7. Seven or more |
| 4. Four | 8. None of them |

6. How often do you talk with your friends about what you are doing sexually? Would you say . . .

1. Very often
2. Fairly often
3. Sometimes
4. Seldom
5. Never

APPENDIX G

Subject's Sexual Attitude Scale

APPENDIX G

Subject's Sexual Attitude Scale

These questions were part of the written questionnaire. Cutoff points for the Guttman Scale are indicated by the line under the answer. Total scale runs from 1 to 5, not permissive to permissive.

1. What is the most intimate behavior you feel it is acceptable for a female to engage in with a male she has just met or knows only casually?
 0. No physical relationship
 1. Kissing
 2. Light petting (above waist)
 3. Heavy petting (below waist)
 4. Intercourse
2. What is the most intimate behavior you feel it is acceptable for a female to engage in with a friend of the opposite sex?
 0. No physical relationship
 1. Kissing
 2. Light petting (above waist)
 3. Heavy petting (below waist)
 4. Intercourse
3. What is the most intimate behavior you feel it is acceptable for a female to engage in with someone she has affection for but does not love?
 0. No physical relationship
 1. Kissing
 2. Light petting (above waist)
 3. Heavy petting (below waist)
 4. Intercourse
4. What is the most intimate behavior you feel is acceptable for a female to engage in with someone she loves?
 0. No physical relationship
 1. Kissing
 2. Light petting (above waist)
 3. Heavy petting (below waist)
 4. Intercourse

APPENDIX H

Rosenberg Self-Esteem Scale

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APPENDIX H

Rosenberg Self-Esteem Scale

Please decide if you Strongly Agree, Agree, Disagree, or Strongly Disagree with the following self-statements, and mark the appropriate number on your answer sheet:

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
1. On the whole, I am satisfied with myself.	1	2	3	4
2. At times I think I am no good at all.	1	2	3	4
3. I feel that I have a number of good qualities.	1	2	3	4
4. I feel that I am able to do things as well as most people.	1	2	3	4
5. I feel that I do not have much to be proud of.	1	2	3	4
6. I certainly feel useless at times.	1	2	3	4
7. I feel that I am a person of worth, at least on a plane with other people.	1	2	3	4
8. I wish that I could have more respect for myself.	1	2	3	4
9. All in all, I am inclined to feel that I am a failure.	1	2	3	4
10. I take a positive attitude toward myself.	1	2	3	4

APPENDIX I
Rotter I-E Scale

APPENDIX I: Rotter I-E Scale

Below are a series of paired statements. For each pair, please put on your answer sheet the number of the statement that comes closest to your position. Choose one statement from each pair.

1. 1 ___ Children get into trouble because their parents punish them too much.
2 ___ The trouble with most children nowadays is that their parents are too easy with them.
2. 1 ___ Many of the unhappy things in people's lives are partly due to bad luck.
2 ___ People's misfortunes result from the mistakes they make.
3. 1 ___ One of the major reasons why we have wars is because people don't take enough interest in politics.
2 ___ There will always be wars, no matter how hard people try to prevent them.
4. 1 ___ In the long run people get the respect they deserve in this world.
2 ___ Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. 1 ___ The idea that teachers are unfair to students is nonsense.
2 ___ Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. 1 ___ Without the right breaks one cannot be an effective leader.
2 ___ Capable people who fail to become leaders have not taken advantage of their opportunities.
7. 1 ___ No matter how hard you try some people just don't like you.
2 ___ People who can't get others to like them don't understand how to get along with others.
8. 1 ___ Heredity plays the major role in determining one's personality.
2 ___ It is one's experiences in life which determine what one is like.
9. 1 ___ I have often found that what is going to happen will happen.
2 ___ Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

Rotter I-E Scale (cont'd.)

10. 1__ In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
2__ Many times questions tend to be so unrelated to coursework that studying is really useless.
11. 1__ Becoming a success is a matter of hard work, luck has little or nothing to do with it.
2__ Getting a good job depends mainly on being in the right place at the right time.
12. 1__ The average citizen can have an influence in government decisions.
2__ This world is run by the few people in power, and there is not much the little guy can do about it.
13. 1__ When I make plans, I am almost certain that I can make them work.
2__ It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. 1__ There are certain people who are just no good.
2__ There is some good in everybody.
15. 1__ In my case getting what I want has little or nothing to do with luck.
2__ Many times we might just as well decide what to do by flipping a coin.
16. 1__ Who gets to be the boss often depends on who was lucky enough to be in the right place first.
2__ Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. 1__ As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
2__ By taking an active part in political and social affairs the people can control world events.
18. 1__ Most people don't realize the extent to which their lives are controlled by accidental happenings.
2__ There is really no such thing as "luck."

Rotter I-E Scale (cont'd.)

19. 1 One should always be willing to admit mistakes.
2 It is usually best to cover up one's mistakes.
20. 1 It is hard to know whether or not a person really likes you.
2 How many friends you have depends on how nice a person you are.
21. 1 In the long run the bad things that happen to us are balanced by the good ones.
2 Most misfortunes are the results of lack of ability, ignorance, laziness, or all three.
22. 1 With enough effort we can wipe out political corruption.
2 It is difficult for people to have much control over the things politicians do in office.
23. 1 Sometimes I can't understand how teachers arrive at the grades they give.
2 There is a direct connection between how hard I study and the grades I get.
24. 1 A good leader expects people to decide for themselves what they should do.
2 A good leader makes it clear to everybody what their jobs are.
25. 1 Many times I feel that I have little influence over the things that happen to me.
2 It is impossible for me to believe that chance or luck plays an important role in my life.
26. 1 People are lonely because they don't try to be friendly.
2 There's not much use in trying too hard to please people, if they like you they like you.
27. 1 There is too much emphasis on athletics in college.
2 Team sports are a way to build character.
28. 1 What happens to me is my own doing.
2 Sometimes I feel that I don't have enough control over the direction my life is taking.
29. 1 Most of the time I can't understand why politicians behave the way they do.
2 In the long run people are responsible for bad government on a national as well as a local level.

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